ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL ABRACZINSKAS
Director

NORTH CAROLINA
Environmental Quality

DRAFT

Mr. Robert McCracken
VP - General Manager
Nucor Steel – Hertford
Post Office Box 279
Winton, North Carolina 27986

Dear Mr. McCracken:

SUBJECT: Air Quality Permit No. 08680T22
Facility ID: 4600099
Nucor Steel – Hertford
1505 River Road
Cofield, Hertford County, North Carolina 27922
Fee Class: Title V
PSD Class: Major

In accordance with your completed application for a Prevention of Significant Deterioration (PSD) Permit received December 22, 2016, we are forwarding herewith Air Quality Permit No. 08680T22 to Nucor Steel - Hertford, 1505 River Road, Cofield, North Carolina, authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of GS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of GS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in GS 143-215.114A and 143-215.114B.

Hertford County has triggered increment tracking under PSD for PM-10, SO_2, and NOx. This modification will result in an increase of 4.11 pounds per hour of PM-10, 0.08 pounds per hour of SO_2, and 15.87 pounds per hour of NOx.

This Air Quality Permit shall be effective from DRAFT until June 30, 2019, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Kevin Godwin at (919) 707-8480 (kevin.godwin@ncdenr.gov).

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

c: Heather Ceron, EPA Region IV
Robert Fisher, Supervisor, Washington Regional Office
Central Files
Connie Horne (cover letter only)

ATTACHMENT Permit No. 08680T22

Insignificant Activities per 15A NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description
I-01	Barge unloading/loading operations
I-03	Paved roads
I-04	Scale pits (i.e., to store scale from steel products collected in flumes and transported with water)
I-05	Primary process water clarifiers and backwash holding tank
I-06	Tundish dumping, tearout, and refractory relining
I-07	Ladle dumping, tearout, and rebricking
I-08	Electric arc furnace refractory rebuild
I-09	Rolling mill operations including: descaling station, shear station, side trimmer, deburring, leveler, roll grinding, and cooling beds
I-10	Non-halogenated solvent parts washers
I-11	Scrap and raw material storage and handling (other than transport on unpaved roads)
I-12	Alloy storage and handling
I-13	Ladle and tundish grout mixing equipment
I-14	Caster steam vents
I-15	Caster quench box vents
I-16	Scarfing slabs
I-17	Air Separator Unit (ASU) sump vents and cooling towers
I-18	Caster mold/segment repair
I-19	Product paint labeling
I-22	Miscellaneous maintenance activities (e.g. welding machines, torches, sandblasting, painting, etc.)
I-23	Mill scale screening plant
I-41	Degasser cooling tower
I-42	HT Cooling tower
I-44	Oxygen Plant Cooling tower
IOT-01	Diesel fuel storage tank (550 gallon capacity)
IOT-02	Hydraulic fluid storage tank (2,400 gallon capacity)
IOT-03	Hydraulic fluid storage tank (1,130 gallon capacity)
IOT-04	Oil/water separator (3,740 gallon capacity)
IOT-05	Used oil storage tank (2,000 gallon capacity)
IOT-06	Hydraulic fluid storage tank (2,400 gallon capacity)
IOT-07	Used oil/grease storage tank (4,000 gallon capacity)

Emission Source ID No.	Emission Source Description
IOT-09	Diesel fuel storage tank (500 gallon capacity)
IOT-10	Diesel fuel storage tank (5,000 gallon capacity)
IOT-11	Used oil storage tank (1,070 gallon capacity)
IOT-12	FR46 Ecosafe storage tank (4,500 gallon capacity)
IOT-13	Bulk mixed oil storage tank (2,000 gallon capacity)
IOT-15	FR46 Ecosafe storage tank (2,300 gallon capacity)
IOT-16	FR46 Ecosafe storage tank (5,500 gallon capacity)
IOT-17	FR46 Ecosafe storage tank (3,100 gallon capacity)
IOT-18	FR46 Ecosafe storage tank (1,770 gallon capacity)
IOT-19	Hydraulic fluid storage tank (2,112 gallon capacity)
IOT-20	Waste oil and water storage tank (2,300 gallon capacity)
IOT-21	Hydraulic fluid storage tank (2,300 gallon capacity)
IOT-22	Engine oil storage tank (500 gallon capacity)
IOT-23	Diesel fuel oil storage tank (10,000 gallon capacity)
IOT-24	Diesel fuel oil storage tank (500 gallon capacity)
IOT-25	Metsafe FR 200 storage tank (1,230 gallon capacity)
IOT-27	Glycol storage tank (10,000 gallon capacity)
IOT-28	Quintlubric storage tank (4,500 gallon capacity)
IOT-29	Diesel fuel oil storage tank (3,000 gallon capacity)
IOT-30	Metsafe FR 200 storage tank (2,700 gallon capacity)
IOT-31	Metsafe FR 200 storage tank (2,700 gallon capacity)
IOT-32	FR46 Ecosafe storage tank (2,000 gallon capacity)
IOT-36	Hydraulic fluid storage tank (4,500 gallon capacity)
IOT-37	Mobile 632 storage tank (1,400 gallon capacity)
IOT-38	FR46 Ecosafe storage tank (2,760 gallon capacity)
IOT-39	FR46 Ecosafe storage tank (2,760 gallon capacity)
IOT-40	Hydraulic fluid storage tank (550 gallon capacity)
IOT-41	Hydraulic fluid storage tank (550 gallon capacity)
IOT-42	Diesel fuel oil storage tank (500 gallon capacity)
IOT-50	Used oil storage tank (2,000 gallon capacity)
IOT-51	Diesel fuel oil storage tank (2,000 gallon capacity)
IOT-53	Motor/hydraulic oil storage tank (2,500 gallon capacity)
IOT-54	Motor/hydraulic oil storage tank (2,500 gallon capacity)
IOT-55	Diesel fuel oil storage tank (2,000 gallon capacity)
IOT-57	Engine oil storage tank (700 gallon capacity)
IOT-58	Lube oil storage tank (500 gallon capacity)
IOT-59	Lube oil storage tank (500 gallon capacity)

Emission Source ID No.	Emission Source Description
IOT-60	Lube oil storage tank (500 gallon capacity)
IOT-61	Motor oil storage tank (275 gallon capacity)
IOT-62	Used oil storage tank (500 gallon capacity)
IOT-63	Transmission fluid storage tank (225 gallon capacity)
IOT-64	Diesel fuel oil storage tank (10,000 gallon capacity)
IOT-65	Diesel fuel oil storage tank (1,000 gallon capacity)
IOT-67	Motor oil storage tank (150 gallon capacity)
IOT-68	Motor oil storage tank (150 gallon capacity)
IOT-69	Used oil storage tank (350 gallon capacity)
IOT-70	Diesel fuel oil storage tank (1,000 gallon capacity)
IOT-72	Kerosene storage tank (280 gallon capacity)
IOT-73	Diesel fuel oil storage tank (500 gallon capacity)
IOT-75	Used oil storage tank (300 gallon capacity)
IOT-76	Diesel fuel oil storage tank (300 gallon capacity)
IOT-77	Diesel fuel oil storage tank (500 gallon capacity)
IOT-78	Diesel fuel oil storage tank (500 gallon capacity)
IOT-79	Hydraulic fluid storage tank (700 gallon capacity)
IOT-80	Kerosene storage tank (300 gallon capacity)
IOT-81	Diesel fuel oil storage tank (500 gallon capacity)
IOT-83	Ecosafe storage tank (330 gallon capacity)
IOT-84	Antifreeze storage tank (275 gallon capacity)
IOT-85	Diesel fuel oil storage tank (1,000 gallon capacity)
IOT-86	Diesel fuel oil storage tank (500 gallon capacity)
IOT-90	Used oil storage tank (325 gallon capacity)
IOT-91	Motor oil storage tank (700 gallon capacity)
IOT-92	Gear lube oil storage tank (225 gallon capacity)
IOT-93	Kerosene storage tank (500 gallon capacity)
I-39	Oxygen Plant Heater
I-40	Oxygen Plant Cooling Tower
I-43	Cooling tower for roll mill
I-FH	Fume hood for quality control lab

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the Permittee is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit.”
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.

Summary of Changes to Permit

The following changes were made to the Nucor Steel – Cofield, Air Permit No. 08680T21:

Page No.	Section	Description of Change(s)
Cover letter	N/A	Amended application type; permit revision numbers, and dates. Updated PSD increment tracking statement.
1	Permit cover page	Amended permit revision numbers and all dates.
Throughout	All, Header	Updated permit revision number
3, 5, and 6	Table of Emission Sources	Updated description of source (ID No. ES02) to "Ladle Metallurgy Furnace." Included PSD descriptor for source (ID No. ES93A). Changed fuel from No. 2 fuel oil to Natural Gas for source (ID No. ES204)
13	2.1 A.4. b. and c.	Updated PSD BACT fugitive emission limits for sources (ID Nos. ES01, ES02, ES03, ES05 through ES15, and ES94) and Roof Monitors (ID Nos. EP03 and EP04).
14	2.1 A. 4. d. i.	Revised testing requirement for Melt Shop baghouse sources.
16	2.1 A. 5. b. and c. i.	Removed visible emissions as an indicator. Revised CAM language as proposed in the application.
23	2.1 B. 3. b. and c. i.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments. Revised testing requirement for reheat furnace (ID No. ES04).
28	2.1 D. 2. b.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments.
29 and 30	2.1 E. 2. b. and 3. b.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments.
31	2.1 F. 1. b.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments.
35	2.1 H. 1. a. and c.	Included source (ID No. ES107).
36	2.1 H. 3. a.	Removed the PSD BACT limit restricting emergency RICE (ID Nos. ES80, ES81, ES82, ES84, and ES86 through ES90) to 100 hours per 12-consecutive month period. Included sources (ES103 through ES 105, ES107, ES116, and ES210).
49	2.1 I. 3. b.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments.
50 and 51	2.1 J. 4.	Included PSD BACT condition.
56	2.1 L. 2. b.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments.
59	2.1 M. 3. b.	Updated PSD pounds per hour limits for compliance with NAAQS and PSD increments.
61, 63, and 64	2.1 O. 4. and 5.	Included PSD BACT conditions.
67	2.1 P. 3.	Included PSD BACT condition.
72	2.1 Q. 4.	Included PSD BACT condition.
78	2.1 S. 5. 2.1 S. 6., 7., and 8.	Removed requirement for an application submittal under 15A NCAC 02Q .0504. Included PSD BACT condition.
81	2.1 T. 5.	Included PSD BACT condition.

Page No.	Section	Description of Change(s)
83	2.2 A.1.	Updated limits in condition pertaining to 15A NCAC 02D .1100 "Control of Toxic Air Pollutants (TAP)" based on most recently approved modeling. Also, removed sources that are subject to a MACT standard. Removed TAP testing requirements.
Old page 80	2.2 D.1.	Removed PSD Avoidance Condition.
87	3 - General Conditions	Updated General Conditions to most recent shell version (version 5.3, 08/21/2018).

State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
08680T22	08680T21	DRAFT	June 30, 2019

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Nucor Steel – Hertford**
Facility ID: **4600099**

Facility Site Location: **1505 River Road**
City, County, State, Zip: **Cofield, Hertford County, North Carolina, 27922**

Mailing Address: **P.O. Box 279**
City, State, Zip: **Winton, North Carolina 27986**

Application Number: **4600099.16C**
Complete Application Date: **December 22, 2016**
Primary SIC Code: **3312**
Division of Air Quality, Regional Office Address: **Washington Regional Office**
943 Washington Square Mall
Washington, North Carolina 27889

Permit issued this the XX day of XX, XXXX

_____
William D. Willets, P.E., Chief, Permitting Section
By Authority of the Environmental Management Commission

Table of Contents

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Melt Shop				
7, 8	ES01 **NSPS AAa** **MACT** **YYYYY** **PSD** **CAM**	One DC Electric Arc Furnace (350 ton per hour maximum capacity, 2,190,000 ton per year annual capacity) equipped with a direct-shell evacuation control system and roof canopy hood	CD01	One negative pressure baghouse (530,620 square feet of filter area)
7, 8	ES02 **PSD**	One Ladle Metallurgy Furnace		
7, 8	ES03 **PSD**	One water-cooled continuous slab caster equipped with a canopy hood		
7, 8	ES16 **NSPS AAa** **PSD**	One dust transport and storage system		
72	ES203 **PSD**	Two (2) natural gas-fired lime injection system burners (12.36 million Btu per hour total heat input)		
Melt Shop Appurtenant Natural gas Combustion Sources				
7, 8	ES05 **PSD**	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES06 **PSD**	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES07 **PSD**	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES08 **PSD**	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES09 **PSD**	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES10 **PSD**	Natural gas direct-fired ladle dryer (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES11 **PSD**	Natural gas direct-fired tundish pre-heater (10 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES12 **PSD**	Natural gas direct-fired tundish pre-heater (10 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES13 **PSD**	Natural gas direct-fired tundish dryer (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7, 8	ES14 **PSD**	Natural gas direct-fired tundish dryer (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES15 **PSD**	Natural gas direct-fired tundish nozzle pre-heater (5 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
7, 8	ES94 **PSD**	Natural gas direct-fired ladle pre-heater (9 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
8	ES106 **PSD**	Natural gas direct-fired ladle preheater (10 million Btu per hour maximum heat input rate)	N/A	N/A
Heat Treating Facility				
55	ES95 **PSD**	Shot blaster	CD06	Bagfilter (2:1 gas/cloth ratio)
58	ES96 **PSD**	Natural gas-fired austenitizing furnace (36 million Btu per hour maximum heat input capacity)	N/A	N/A
58	ES97 **PSD**	Natural gas-fired tempering furnace (37 million Btu per hour maximum heat input capacity)	N/A	N/A
28, 29	ES102 **PSD**	Two-cell cooling tower (3,000 gallon per minute maximum flow rate)	CD08	Mist eliminator (0.005 percent drift loss)
72	ES205 **PSD**	Natural gas-fired plasma shear with 2 heads (0.32 million Btu per hour heat input)	CD15	Bagfilter (1.05:1 air to cloth ratio)
Q&T Line				
47	ES98 **PSD**	Ten natural gas/oxyfuel-fired torches on the Q&T line (0.4 million Btu per hour total heat input rate)	CD07	Cartridge filter
47	ES99 **PSD**	Eight natural gas/oxyfuel-fired torches and two plasma torches on the Q&T line (0.32 million Btu per hour total heat input rate)		
Normalizing Line				
50	ES117 **PSD**	Natural gas-fired normalizing furnace (29.8 million Btu per hour maximum heat input capacity)	N/A	N/A
61	ES108 **PSD**	Plasma shear (0.32 million Btu per hour maximum heat input capacity) on the normalizing line	CD09	Bagfilter (2.1:1 maximum air to cloth ratio)
61	ES109 **PSD**	Plasma torch (0.32 million Btu per hour maximum heat input capacity) on the normalizing line		
61	ES110 **PSD**	Plasma shear (0.32 million Btu per hour maximum heat input capacity) on the normalizing line	CD10	Bagfilter (2.1:1 maximum air to cloth ratio)
61	ES111 **PSD**	Plasma torch (0.32 million Btu per hour maximum heat input capacity) on the normalizing line		
65	ES115 **PSD**	Shot blaster	CD14	Bagfilter (2.1:1 maximum air to cloth ratio)
DRI Handling Operations				
67	ES112 **PSD**	DRI Barge Receiving Hopper	CD11	Bagfilter (3.9:1 maximum air to cloth ratio)

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
67	ES113A and ES113B **PSD**	DRI Storage Silos	CD12	Bagfilter (3.9:1 maximum air to cloth ratio)
67	ES114 **PSD**	DRI Day Bins	CD13	Bagfilter (3.9:1 maximum air to cloth ratio)
Cooling Towers				
29	ES38 **PSD**	One 2-cell contact cooling tower (25,000 gallon per minute maximum flow rate)	CDME38	Mist eliminator (0.008 percent drift loss)
29	ES39 **PSD**	One 5-cell non-contact cooling tower (95,000 gallon per minute maximum flow rate)	CDME39	Mist eliminator (0.008 percent drift loss)
29	ES40 **PSD**	One 1-cell contact air compressor cooling tower (5,646 gallon per minute maximum flow rate)	CDME40	Mist eliminator (0.008 percent drift loss)
Other Sources				
22	ES04 **PSD**	Natural gas direct-fired reheat furnace (309 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
52	ES100 **PSD**	Vacuum degasser (350 tons of steel per hour maximum production capacity)	N/A	N/A
24	ES17 through ES26 **PSD**	Ten lime and/or injection carbon storage silo	CD02	Four bin vent filters (117 square feet of filter area, each)
24	ES93A **PSD**	Railcar and/or truck unloading of lime	N/A	N/A
24	ES93 **PSD**	Railcar and/or truck unloading of injection carbon	CD05	One baghouse (1,000 square feet of filter area)
27	ES37 **PSD**	Slag handling process consisting of crushing, conveying, screening, and stacking/loadout from storage piles	N/A	N/A
32	ES41 **PSD**	Unpaved roadways	N/A	N/A
72	ES202 **PSD**	Natural gas-fired car bottom furnace (50 million Btu per hour heat input)	N/A	N/A
72	ES206 **PSD**	Natural gas-fired burning bed (in shipping area) with 4 shear/torches (0.32 million Btu per hour total heat input)	CD16	Bagfilter (1.69:1 air to cloth ratio)
Internal Combustion Engine Sources				
34	ES80 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency generator (2,000 kW maximum rated power output)	N/A	N/A
34	ES81 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency generator (2,000 kW maximum rated power output)	N/A	N/A
34	ES82 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency generator (2,000 kW maximum rated power output)	N/A	N/A

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
34	ES84 **MACT ZZZZ, PSD**	One natural gas-fired emergency generator (250 kW maximum rated power output)	N/A	N/A
34	ES86 **MACT ZZZZ, PSD**	One diesel-fired emergency generator (90 kW maximum rated power output)	N/A	N/A
34	ES87 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency water pump (130 kW maximum rated power output)	N/A	N/A
34	ES88 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency water pump (180 kW maximum rated power output)	N/A	N/A
34	ES89 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency water pump (110 kW maximum rated power output)	N/A	N/A
34	ES90 **MACT ZZZZ, PSD**	One diesel fuel-fired emergency water pump (630 kW maximum rated power output)	N/A	N/A
34	ES103 **MACT ZZZZ, NSPS JJJJ, PSD**	One natural gas-fired emergency generator (131 kW maximum rated power output)	N/A	N/A
34	ES104 **MACT ZZZZ, NSPS JJJJ, PSD**	One natural gas-fired emergency generator (300 kW maximum rated power output)	N/A	N/A
34	ES105 **MACT ZZZZ, NSPS JJJJ, PSD**	One natural gas-fired emergency generator (300 kW maximum rated power output)	N/A	N/A
34	ES107 **MACT ZZZZ, NSPS IIII, PSD**	One diesel fuel-fired radio tower generator (20 kW maximum rated power output)	N/A	N/A
34	ES116 **NSPS JJJJ, MACT ZZZZ, PSD**	Natural gas-fired Emergency Generator (4.1 million Btu per hour heat input rate, 300 kW maximum power output)	NA	NA
34	ES210* **NSPS JJJJ, MACT ZZZZ, PSD**	Natural gas-fired Emergency Generator (450 kW maximum power output)	NA	NA
Miscellaneous Sources				
60	TES02	Natural gas-fired space heaters, process water heaters, and air make up heaters	N/A	N/A
60	TES17	Air separator unit natural gas-fired heater (0.75 million Btu per hour maximum heat input rate)	N/A	N/A
60	TES21	Natural gas-fired natural gas pipeline heater (0.75 million Btu per hour maximum heat input rate)	N/A	N/A
73	OT-08 **MACT CCCCCC**	Gasoline storage tank (250 gallon capacity)	N/A	N/A
73	OT-43 **MACT CCCCCC**	Gasoline storage tank (1,000 gallon capacity)	N/A	N/A

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
75	ES201 **PSD**	Natural gas-fired 2 bundle oxygen vaporizer (Bundle #1 is 8.47 million Btu per hour heat input and Bundle #2 is 3.74 million Btu per hour heat input)	N/A	N/A
72	ES204 **PSD**	Natural gas-fired temporary boiler (11.16 million Btu per hour heat input)	N/A	N/A
72	ES207 **PSD**	Rolling mill operations	N/A	N/A
80	ES208* **NSPS – Subpart Dc, PSD**	Oxygen Plant Vaporizer 1 (11.0 million Btu per hour heat input)	NA	NA
80	ES209* **NSPS – Subpart Dc, PSD**	Oxygen Plant Vaporizer 2 (11.0 million Btu per hour heat input)	NA	NA

***** These emission sources (ID Nos. ES208, ES209, and ES210) are listed as a minor modification per 15A NCAC 02Q .0515. The compliance certification as described in General Condition P is required. Unless otherwise notified by NC DAQ, the affected terms of this permit (excluding the permit shield as described General Condition R) for this source shall become final on August 1. 2018. Until this date, the affected permit terms herein reflect the proposed operating language that the Permittee shall operate this source pursuant to 15A NCAC 02Q .0515(f).

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. The Melt Shop, including the following:

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
Melt Shop			
ES01	One DC Electric Arc Furnace (350 ton per hour maximum capacity, 2,190,000 ton per year annual capacity) equipped with a direct-shell evacuation control system and roof canopy hood	CD01	One negative pressure baghouse (530,620 square feet of filter area)
ES02	One Ladle Metallurgy Furnace		
ES03	One water-cooled continuous slab caster equipped with a canopy hood		
ES16	One dust transport and storage system		
Melt Shop Appurtenant Natural gas Combustion Sources			
ES05	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES06	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES07	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES08	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES09	Natural gas direct-fired ladle pre-heater (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES10	Natural gas direct-fired ladle dryer (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES11	Natural gas direct-fired tundish pre-heater (10 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES12	Natural gas direct-fired tundish pre-heater (10 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES13	Natural gas direct-fired tundish dryer (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES14	Natural gas direct-fired tundish dryer (15 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES15	Natural gas direct-fired tundish nozzle pre-heater (5 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES94	Natural gas direct-fired ladle pre-heater (9 million Btu per hour maximum heat input rate) with low-NO_X burners	N/A	N/A
ES106	Natural gas direct-fired ladle preheater (10 million Btu per hour maximum heat input rate)	N/A	N/A
Melt Shop Fugitive Emissions			
NA	Melt Shop roof monitor (EP03) venting fugitive emissions from source ES01	N/A	N/A
NA	Melt Shop roof monitor (EP04) venting fugitive emissions from sources ES02, ES03, ES05 through ES15, ES94, and ES106; and	N/A	N/A

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20% opacity – Roof monitor EP04	15A NCAC 2D .0521
	< 3% opacity – EAF CD01 < 6% opacity – Roof monitor EP03 < 10% opacity – Dust transport/storage system ES16	15A NCAC 2D .0524 [40 CFR Part 60, Subpart AAa]
Particulate matter	PM emissions from EAF (ID No. ES01) shall not exceed 12 milligrams per dry standard cubic meter	15A NCAC 2D .0524 [40 CFR Part 60, Subpart AAa]
	CAM for ES01 and CD01	15A NCAC 2D .0614

Regulated Pollutant	Limits/Standards	Applicable Regulation
Various	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Toxic Air Pollutants	See Section 2.2 A **State-enforceable only**	15A NCAC 2D .1100
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 2D .1111 [40 CFR Part 63, Subpart YYYYY]

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the preheaters and dryers (**ID Nos. ES05 through ES15, ES94, and ES106**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in the preheaters and dryers (**ID Nos. ES05 through ES15, ES94, and ES106**).

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the Melt Shop Roof Monitor (**ID No. EP04**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once per day the Permittee shall observe the emission points of the Melt Shop Roof Monitor (**ID No. EP04**) for any visible emissions above normal. The daily observation shall be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semiannual period. If visible emissions from the Melt Shop Roof Monitor (**ID No. EP04**) are observed to be above normal, the Permittee shall either:

i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 A.2.a above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0524: NSPS, STANDARDS OF PERFORMANCE FOR STEEL PLANTS: ELECTRIC ARC FURNACES AND ARGON-OXYGEN DECARBURIZATION VESSELS CONSTRUCTED AFTER AUGUST 17, 1983 [40 CFR 60 SUBPART AAa]

Applicability [15A NCAC 2D .0524]

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524, "New Source Performance Standards" (NSPS) as promulgated in 40 CFR Part 60, Subpart AAa, including Subpart A "General Provisions."

Emission Limitations [40 CFR §60.272a]

b. The Permittee shall limit particulate matter emissions from the affected sources such that:
   i. From the Melt Shop baghouse **(ID No. CD01):** Visible emissions (six minute average in accordance with Method 9) shall be less than three percent opacity and particulate matter emissions shall be less than or equal to 0.0052 grains per dry standard cubic foot;
   ii. From the dust transport and storage system **(ID No. ES16):** Visible emissions (six minute average in accordance with Method 9) shall be less than ten percent opacity; and
   iii. From Melt Shop roof monitor **(ID No. EP03):** Visible emissions (six minute average in accordance with Method 9) due to fugitive emissions from the EAF **(ID No. ES01)** shall be less than six percent opacity.

Testing [15A NCAC 2Q .0508(f) and 40 CFR §§60.8 and 60.275a]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.3.b, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 and 40 CFR Part 60, Subpart AAa.

Operational Requirements [40 CFR §§60.273a and 60.274a]

d. Operation at parameter levels outside those levels established during the most recent compliance demonstration may be considered to be unacceptable operation and maintenance. The Permittee shall maintain the following parameters at the appropriate levels (i.e., as determined during the most recent compliance demonstration):
   i. Observations of shop opacity in accordance with Section 2.1 A.3.e, above; **OR**
   ii. The pressure in the free space inside the EAF **(ID No. ES01)** during the meltdown and refining period(s), if the EAF is equipped with a static pressure gauge; **AND EITHER**
   iii. The direct-shell evacuation control (DEC) system fan motor amperes and all damper positions; **OR**
   iv. The volumetric flow rate through each separately ducted hood of the DEC system; **OR**
   v. The volumetric flow rate at the Melt Shop baghouse **(ID No. CD01)** inlet and all damper positions.

Monitoring [15A NCAC 2Q .0508(f) and 40 CFR §§60.273a and 60.274a]

e. For the Melt Shop and the EAF **(ID No. ES01)** the Permittee shall **EITHER**:
   i. Monitor the opacity of the visible emissions from the Melt Shop (determined as the arithmetic average of 24 consecutive 15-second opacity observations taken in accordance with Method 9 while the furnace is operating in the meltdown and refining period) at the emission point of roof monitor **(ID No. EP03)** at least once per day; **OR**
   ii. Monitor the pressure in the free space inside the EAF **(ID No. ES01)** at least once per shift via a static pressure monitor that is installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations; has an accuracy of +/- 5 millimeters of water gauge over its normal operating range; is installed in any appropriate location in the EAF **(ID No. ES01)** or the associated DEC system duct prior to the introduction of ambient air such that reproducible results will be obtained; and records the pressure as 15-minute integrated averages; **AND EITHER**:
   iii. Monitor the DEC system fan motor amperes and all damper positions at least once per shift; **OR**
   iv. Monitor the volumetric flow rate through each separately ducted hood of the DEC system via a monitor that: is installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations; has an accuracy of +/- 10 percent over its normal operating range; is installed in any appropriate location in the exhaust duct such that reproducible results will be obtained; and continuously records the volumetric flow rate through each separately ducted hood of the DEC system; **OR**
   v. Record all damper positions of, and monitor the volumetric flow rate at the inlet of, the Melt Shop baghouse **(ID No. CD01)** via a monitor that: is installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations; has an accuracy of +/- 10 percent over its normal operating range; is installed in any appropriate location in the exhaust duct such that reproducible results will be obtained; and continuously records the volumetric flow rate at the Melt Shop baghouse **(ID No. CD01)** inlet.

f. For the Melt Shop baghouse **(ID No. CD01)** the Permittee shall **EITHER**:
   i. Monitor the opacity of the visible emissions from the Melt Shop baghouse **(ID No. CD01)** via a continuous opacity monitoring system (COMS) that is installed, calibrated, operated, and maintained in accordance with the equipment manufacturer's recommendations; **OR**
   ii. Monitor the opacity of the visible emissions from the Melt Shop baghouse **(ID No. CD01)** in accordance with Method 9 for at least three 6-minute periods at least once per day while the EAF **(ID No. ES01)** is operating in the melting and refining period; **AND**
   iii. Monitor the particulate matter emissions from the Melt Shop baghouse **(ID No. CD01)** via a continuously operated bag leak detection system (BLDS). The Permittee shall monitor the BLDS

output; the BLDS adjustments including the date and time of adjustment, the initial settings, and the adjusted settings; and BLDS alarm information. The BLDS alarm information includes the date and time of an alarm, the time that procedures to determine the cause of the alarm were initiated and whether those procedures were initiated within 1 hour of the alarm, the cause of the alarm and corrective actions taken, the date and time the cause of the alarm was alleviated and whether the alarm was alleviated within 3 hours of the alarm. The BLDS shall:

(A) Be installed, calibrated, operated, and maintained in accordance with the equipment manufacturer's recommendations, the US EPA guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015) [if the BLDS operates based on the triboelectric effect], and a site-specific monitoring plan that describes:
  (1) Installation of the BLDS;
  (2) Initial and periodic adjustment of the BLDS including how the alarm set-point will be established;
  (3) Operation of the BLDS including quality assurance procedures;
  (4) How the BLDS will be maintained including a routine maintenance schedule and a spare parts inventory list; and
  (5) How the BLDS will be recorded and stored.

(B) Be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations less than or equal to 1 milligram per cubic meter;

(C) Utilize sensors that provide continuous output of relative particulate matter loadings;

(D) Be equipped with an alarm system that will sound when relative particulate matter loadings surpass the alarm set point and is located such that it can be heard by appropriate plant personnel; and

(E) Be initially adjusted by the Permittee to establish the baseline input (i.e., the sensitivity and averaging period), the alarm set points, and the alarm delay, if applicable. After performing the initial BLDS adjustment, the Permittee shall not adjust these settings except as follows:
  (1) The Permittee may adjust these parameters if the Permittee has received approval of the adjustments from NC DAQ;
  (2) The Permittee may adjust the sensitivity of the BLDS in accordance with the site-specific monitoring plan to account for seasonal effects (e.g. temperature and humidity) once per quarter; and
  (3) If the BLDS alarm does not sound while visible emission opacities greater than 0% opacity are observed over four consecutive 15-second observations the Permittee shall lower the alarm set point such that the alarm would have sounded during the period when the visible emission opacity observations were made.

g. The Permittee shall perform monthly operational status inspections of the equipment that is important to the performance of the total capture system (e.g. pressure sensors, dampers, and damper switches) including observations of the physical appearance of the equipment (e.g. structural integrity of ductwork, hoods or the walls and roof of the melt shop building structure; flow constrictions caused by dents or accumulated dust in the ductwork; and fan erosion).

Recordkeeping [15A NCAC 2Q .0508(f) and 40 CFR §§60.273a, 60.274a and 60.276a]

h. The Permittee shall retain records of the parametric monitoring, equipment adjustments and calibrations, and inspections (with deficiencies and corrective actions noted) performed pursuant to Sections 2.1 A.3.e through g, above, and make them available for review by authorized personnel. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 and 40 CFR Part 60, Subpart AAa if the monitoring required in Sections 2.1 A.3.e through g, above, is not performed or if the records are not maintained.

Reporting [15A NCAC 2Q .0508(f) and 40 CFR §§60.273a, 60.274a and 60.276a]

i. The Permittee shall submit a semiannual monitoring summary report postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. These semiannual reports shall clearly identify of all instances of deviations from the requirements of this permit and include:
   i. Any 6-minute period(s) during which the average opacity of visible emissions from the Melt Shop baghouse **(ID No. CD01)** was greater than or equal to 3%;
   ii. Any 6-minute period(s) during which the average opacity of visible emissions due to fugitive emissions from the EAF **(ID No. ES01)** from Melt Shop roof monitor **EP03** was greater than or equal to 6%;
   iii. Periods of EAF **(ID No. ES01)** operation during which the furnace static pressure exceeds the value established during the most recent compliance demonstration (if shop opacities are not conducted in accordance with 40 C.F.R. § 60.273a(d)); **AND EITHER**:
   iv. Periods of EAF **(ID No. ES01)** operation during which the DEC system fan motor operates at ampere levels exceeding +/- 15% of the value established during the most recent compliance demonstration; **OR**
   v. Periods of EAF **(ID No. ES01)** operation during which the volumetric flow rates through each separately ducted hood of the DEC system or at the inlet of the Melt Shop baghouse **(ID No. CD01)** are below the values established during the most recent compliance demonstration.

j. The Permittee shall provide written intent to change notification, if applicable, of which monitoring listed in Sections 2.1 A.3.e and f of this permit, above, shall be used to demonstrate continuous compliance at least two weeks prior to implementing the change.

4. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from the Electric Arc Furnace **(ID No. ES01)**, the Ladle Metallurgy Furnace **(ID No. ES02)**, and the Continuous Slab Caster **(ID No. ES03)**, all controlled by baghouse **(ID No. CD01)**, are as follows:

Pollutant	BACT limits
$PM_{10}/PM_{2.5}$ (filterable)	0.0018 grains per dry standard cubic foot
$PM_{10}/PM_{2.5}$ (filterable and condensable)	0.0052 grains per dry standard cubic foot
SO_2	0.35 pounds per ton of steel produced
	383.25 tons per 12 consecutive month period
NO_X	0.36 pounds per ton of steel produced
	394.2 tons per 12 consecutive month period
CO	2.6 pounds per ton of steel produced
	2847 tons per 12 consecutive month period
VOC	0.13 pounds per ton of steel produced
	142.4 tons per 12 consecutive month period
Lead	0.0016 pounds per ton of steel produced
	1.75 tons per 12 consecutive month period

b. The BACT permitted fugitive emission limits from the Electric Arc Furnace **(ID No. ES01)**, Ladle Metallurgy Furnace **(ID No. ES02)**, Continuous Slab Caster **(ID No. ES03)**, and non-vented natural gas combustion sources **(ID Nos. ES05 through ES15, and ES94)**, vented via Melt Shop Roof Monitors **(ID Nos. EP03 and EP04)**, are as follows:

Pollutant	BACT limits
PM_{10} (filterable and condensable)	19.8 tons per 12 consecutive month period
$PM_{2.5}$ (filterable and condensable)	19.8 tons per 12 consecutive month period
SO_2	4.4 tons per 12 consecutive month period
NO_2	51.3 tons per 12 consecutive month period
CO	108.1 tons per 12 consecutive month period
VOC	19.4 tons per 12 consecutive month period
Lead	0.009 tons per 12 consecutive month period

c. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Melt Shop Baghouse (ID No. CD 01)	$PM_{2.5}$ (filterable and condensable)	51.71
	PM_{10} (filterable and condensable)	51.71
	NO_2	126.59
	Lead	0.456
Melt Shop Roof Monitors (ID Nos. EP03 and EP04)	$PM_{2.5}$ (filterable and condensable)	4.98
	PM_{10} (filterable and condensable)	4.98
	NO_2	13.67
	Lead	0.003

Testing [15A NCAC 2Q .0508(f)]

d. i. For the emission sources listed in Section 2.1 A.4.a, above:

(A) Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits given in Section 2.1 A.4.a. above, by testing NOx and CO emissions from the Melt Shop baghouse **(ID No. CD01)** during the 2nd quarter of each calendar year.

Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limits given in Section 2.1 A.4.a. above, by testing $PM_{2.5}$, PM_{10}, SO_2, VOC, and Lead emissions from the Melt Shop baghouse during the 2nd quarter of calendar year 2021.

If the performance tests for a given pollutant (as listed above) for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the process or air pollution control equipment that could increase emissions, you may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test.

If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for a pollutant (as listed above), you must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period are at or below 75% of the emissions limit.

(B) The testing shall be conducted when the electric arc furnace **(ID No. ES01)**, the ladle metallurgical furnace **(ID No. ES02)**, and the caster **(ID No. ES03)** are all in operation. The capacity at which the annual testing is conducted shall be based on production records and shall be as approved by the DAQ, Washington Regional Office.

(C) The testing shall be performed in accordance with General Condition JJ found in Section 3, and a protocol approved by NC DAQ. At least forty-five (45) days prior to performing this required emissions testing, the Permittee shall develop and submit a testing protocol to the Washington Regional Supervisor, Division of Air Quality for review and approval.

(D) The testing shall utilize the following test methods:

Pollutant	Emission Limit	Based on…	Determined by…
$PM_{10}/PM_{2.5}$ (filterable)	0.0018 grains per dry standard cubic foot	averaging emissions measured by three eight-hour test runs	Methods 5 or 201/201A
$PM_{10}/PM_{2.5}$ (filterable and condensable)	0.0052 grains per dry standard cubic foot	averaging emissions measured by three eight-hour test runs	Methods 5 or 201/201A
Sulfur dioxide	0.35 pounds per ton of steel	averaging emissions measured by three eight-hour test runs	Method 6
Nitrogen oxides	0.36 pounds per ton of steel	averaging emissions measured by three eight-hour test runs	Method 7
Carbon monoxide	2.6 pounds per ton of steel	averaging emissions measured by three eight-hour test runs	Method 10
Volatile organic compounds	0.13 pounds per ton of steel	averaging emissions measured by three eight-hour test runs	Method 25
Lead	0.0016 pounds per ton of steel	averaging emissions measured by three eight-hour test runs	Method 29

(E) If the results of this test are above the limits given in Section 2.1 A.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

ii. For the emission sources listed in Section 2.1 A.4.b, above:

(A) If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3, and a protocol approved by NC DAQ.

(B) If the results of this test are above the limits given in Section 2.1 A.4.b, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

e. i. The following requirements apply:

(A) To ensure that optimum particulate matter control efficiency is maintained by the Melt Shop baghouse **(ID No. CD01)**, inspections and maintenance shall be performed as recommended by the manufacturer and or operating experience. A written or computer based program which details the scheduled maintenance and inspection activities shall be maintained and kept current. The defined activities shall be performed per a set schedule (daily through annually) with a method of tracking and recording the completion of each event.

(B) Steel production shall be limited to 350 tons per hour. Tons of steel per hour shall be measured by actual operating hours and tons of steel produced as measured at the outlet of the caster **(ID No. ES03)** and averaged over a 24-hour day starting at 7am. A daily production record shall be maintained which documents tons produced including any tons that were poured back into EAF, operating hours per day, and average tons per hour.

(C) The baghouse dust transport system and storage **(ID No. ES16)** shall be physically inspected once per month to ensure that the conveyor system is contained within a dust tight enclosure. An inspection record shall be maintained with the date of the inspection, any deficiencies noted, and corrections implemented.

(D) If this monitoring is not conducted or the records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

ii. For the emission sources listed in Section 2.1 A.4.b, above:

(A) The Permittee shall comply with the monitoring and recordkeeping requirements of 15A NCAC 2D .0521 and 15A NCAC 2D .0524 found in Sections 2.1 A.2.c and d and 2.1 A.3.e and h, above.
(B) If this monitoring is not conducted or the records are not maintained, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Reporting [15A NCAC 2Q .0508(f)]

f. i. For the emission sources listed in Section 2.1 A.4.a, above:
(A) The Permittee shall submit a summary report of inspection and maintenance activities within 30 days of a written request by the DAQ.
(B) Within 30 days after conducting the testing required in Section 2.1 A.4.d(i), above, the Permittee shall submit a written report of the test results to the Washington Regional Office.
(C) The Permittee shall provide written notification to the Air Quality Supervisor, Washington Regional Office, of intent to change of the starting time period for calculating the 24-hour production rate as listed in Section 2.1 A.4.e(i)(B), above. The change notification shall be submitted at least two weeks prior to implementing the change.
(D) The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

ii. For the emission sources listed in Section 2.1 A.4.b, above: The Permittee shall comply with the reporting requirements of 15A NCAC 2D .0521 and 15A NCAC 2D .0524 found in Sections 2.1 A.2.e, 2.1 A.3.i(ii), and 2.1 A.3.j, above.

5. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING

a. For the direct-shell evacuation control (DEC) system and the Melt Shop baghouse **(ID No. CD01)**, the Permittee shall comply with 40 CFR Part 64 pursuant to 15A NCAC 2D .0614 to assure that the associated Electric Arc Furnace (EAF) **(ID No. ES01)** complies with the emission limits of 15A NCAC 2D .0524 (i.e., NSPS AAa), and 15A NCAC 2D .0530.

b. To assure compliance particulate matter emissions from the EAF **(ID No. ES01)** shall be controlled by the associated direct-shell evacuation control (DEC) system and the Melt Shop baghouse **(ID No. CD01)**.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To assure compliance, the Permittee shall conduct monitoring of the opacity from the Melt Shop baghouse **(ID No. CD01)** via the associated COMS. The COMS shall be installed, calibrated, operated, and maintained in accordance with 40 CFR 60, Appendix B, Performance Specification 1 (PS1), and Appendix F, Procedure 3.

i. If visible emissions from the Melt Shop baghouse **(ID No. CD01)** with opacity greater than or equal to 3 percent (six minute average) are observed then an excursion has occurred.
(A) In the event of an excursion the Permittee shall take appropriate action to correct the excursion as soon as practicable.
(B) If the total duration of excursion is greater than or equal to 5% of the source (**ID No. ES01**) operating time during any consecutive 6-month period, then the Permittee shall develop a Quality Improvement Plan in accordance with 40 CFR §64.8.

ii. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

(A) The date and time of each recorded action;
(B) The results of the COMS calibrations and monitoring, noting any excursions along with any corrective actions taken to reduce visible emissions; and
(C) The results of any corrective actions performed.

iii. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the visible emissions from the Melt Shop baghouse **(ID No. CD01)** are not monitored or if the records are not maintained.

Recordkeeping and Reporting [15A NCAC 2Q .0508(f) and 40 CFR §64.9]

d. **§64.9 Reporting and recordkeeping requirements.**

(a) *General reporting requirements.*

(1) On and after the date specified in §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with §70.6(a)(3)(iii) of this chapter.

(2) A report for monitoring under this part shall include, at a minimum, the information required under §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(b) *General recordkeeping requirements.*

(1) The owner or operator shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

e. The Permittee shall submit a summary report of the monitoring postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

6. 15A NCAC 2D .1111: 40 CFR Part 63, Subpart YYYYY "NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR AREA SOURCES: ELECTRIC ARC FURNACE STEELMAKING FACILITIES"

Applicability [15A NCAC 2D .1111 and 40 CFR §63.10680]

a. The Electric Arc Furnace **(ID No. ES01)** is subject to Environmental Management Commission Standard 15A NCAC 2D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart YYYYY," including Subpart A "General Provisions."

Control Requirements/Emission Limits [15A NCAC 2D .1111 and 40 CFR §63.10686]

b. The Permittee shall:
   i. Install, operate, and maintain a capture system that collects emissions from the Electric Arc Furnace (EAF) **(ID No. ES01)** and conveys the collected emissions to the Melt Shop baghouse **(ID No. CD01)**;
   ii. Limit discharges from the Melt Shop baghouse **(ID No. CD01)** to less than or equal to 0.0052 grains of particulate matter per dry standard cubic foot;
   iii. Limit visible emission discharges from the Melt Shop monitor **(ID No. EP03)** to less than 6 percent opacity;
   iv. Control the amount of chlorinated plastics, lead, and free organic liquids in the scrap charged into the EAF **(ID No. ES01)** in accordance with the "Pollution Prevention Plan" specified in Section 2.1 A.6.d, below; and
   v. Control the amount of mercury in the scrap charged into the EAF **(ID No. ES01)** in accordance with the methods specified in Section 2.1 A.6.e(i) (Site-specific plan for mercury switches), Section 2.1 A.6.e(ii) (Option for approved mercury programs), Section 2.1 A.6.e(iii) (Option for specialty metal scrap), and/or Section 2.1 A.6.e(iv) (Scrap that does not contain motor vehicle scrap). The Permittee may have different scrap providers, contracts, or shipments subject to different compliance options within Section 2.1 A.6.e(i) through (iv).

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3, and a protocol approved by NC DAQ. If the results of this test are above the limits given in Section 2.1 A.6.b, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart YYYYY.

Monitoring [15A NCAC 2D .1111, 40 CFR §63.10685 and 40 CFR §63.10686]

d. The Permittee shall perform the following monitoring of chlorinated plastic, lead, and free organic liquids in materials charged into the EAF **(ID No. ES01)**:
   i. For the scrap for which the Permittee has opted to comply with the requirements of the "Pollution prevention plan" the Permittee shall [40 CFR §63.10685(a)(1)]:
      (A) Prepare, implement, and submit to NC DAQ for approval a pollution prevention plan (PPP) for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead, and free organic liquid that is charged into the EAF **(ID No. ES01)** while producing steel other than leaded steel and to minimize the amount of chlorinated plastics and free organic liquid that is charged into the EAF **(ID No. ES01)** while producing leaded steel. These requirements do not apply to the routine recycling of bags from the Melt Shop baghouse **(ID No. CD01)** or other internal process or maintenance materials in the EAF **(ID No. ES01)** if those exempted materials are identified in the PPP. The PPP must include:
         (1) Specifications that scrap materials must be depleted (to the extent practicable) of undrained oil filters, chlorinated plastics, and free organic liquids at the time of charging into the EAF **(ID No. ES01)**;

(2) A requirement in the scrap specifications for removal (to the extent practicable) of lead-containing components (e.g. batteries, battery cables, and wheel weights), except for scrap used to produce leaded steel; and
(3) Procedures for determining if the requirements and specifications are being met (e.g. visual inspections or periodic audits of scrap providers) and procedures for taking corrective actions with non-complying vendors.

(B) Maintain a copy of the PPP on-site and operate in accordance with the PPP; and
(C) Provide training on the PPP's requirements to all plant personnel charged with scrap acquisition or inspection duties.

e. The Permittee shall procure scrap containing motor vehicle scrap pursuant to the one of the following compliance options for each scrap provider, contract, or shipment and perform the following monitoring of mercury in materials charged into the EAF **(ID No. ES01)**:
   i. For the scrap for which the Permittee has opted to comply with the requirements of the "Site-specific plan for mercury switches" the Permittee shall:
      (A) Include a requirement in the Nucor Steel-Hertford County Steel Mill scrap specifications for removal of mercury switches from vehicle bodies used to make the scrap;
      (B) Prepare and operate at all times according to a site-specific plan approved by the DAQ demonstrating how the Nucor Steel-Hertford County Steel Mill will implement the scrap specifications in Section 2.1 A.6.e(i) for removal of mercury switches. The plan must include:
         (1) A means of communicating (e.g. letters, contract language, policies for purchasing agents, and scrap inspection protocols) to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper management of the mercury switches removed from that scrap as required under the rules implementing subtitle C of the Resource Conservation and Recovery Act (RCRA) (40 CFR parts 261 through 265 and 268);
         (2) Documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles;
         (3) Provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meet the scrap specification;
         (4) Provisions for periodic inspections or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap and that the mercury switches removed are being properly managed, including the minimum frequency such means of corroboration will be implemented; and
         (5) Provisions for taking corrective actions (i.e., actions resulting in scrap providers removing a higher percentage of mercury switches or other mercury-containing components) if needed, based on the results of procedures implemented in Section 2.1 A.6.e(i)(B)(4), above.
      (C) Establish a goal for each motor vehicle scrap provider to remove at least 80 percent of the mercury switches from the motor vehicle scrap that they send to the Nucor Steel-Hertford County Steel Mill and require each of those providers to provide an estimate (and the basis for the estimate) of the number of mercury switches removed from the motor vehicle scrap that they sent to the Nucor Steel-Hertford County Steel Mill during the previous year.
      [40 CFR §63.10685(b)(1)]
   ii. For the scrap for which the Permittee has opted to comply with the requirements of the "Option for approved mercury programs" the Permittee shall:

(A) Certify that they participate in and purchase motor vehicle scrap only from scrap providers, or from brokers who obtained that motor vehicle scrap from other scrap providers, who participate in an EPA-approved program, based on the criteria in Sections 2.1 A.6.e(ii)(B)(1) through (3), below, for removal of mercury switches.

(B) The criteria for EPA-approval of a program for removal of mercury switches include:

(1) The program includes outreach that informs the dismantlers of the need for removal of mercury switches and provides training and guidance for removing mercury switches;

(2) The program has a goal to remove at least 80 percent of mercury switches from the motor vehicle scrap the scrap provider processes; and

(3) The program sponsor agrees to submit progress reports to the EPA Administrator no less frequently than once every year that provide the number of mercury switches removed or the weight of mercury recovered from the switches, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were recycled at facilities with permits as required under the rules implementing subtitle C of RCRA (40 CFR parts 261 through 265 and 268).

(C) The Permittee shall develop and maintain onsite a plan demonstrating the manner through which the Nucor Steel-Hertford County Steel Mill is participating in the EPA-approved program.

(1) The plan must include facility-specific implementation elements, corporate-wide policies, and/or efforts coordinated by a trade association as appropriate for each facility.

(2) The Permittee shall provide in the plan documentation of direction to appropriate staff to communicate to suppliers throughout the scrap supply chain the need to promote the removal of mercury switches from end-of-life vehicles.

(3) The Permittee shall conduct periodic inspections or provide other means of corroboration to ensure that scrap providers are aware of the need for and are implementing appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

[40 CFR §63.10685(b)(2)]

iii. For the scrap for which the Permittee has opted to comply with the requirements of the "Option for specialty metal scrap" the Permittee shall certify that only materials recovered from motor vehicles in the scrap are materials recovered for their specialty alloy content which, based on the nature of the scrap and purchase specifications, are not reasonably expected to contain mercury switches.
[40 CFR §63.10685(b)(3)]

iv. For the scrap for which the Permittee has opted to comply with the requirements of the "Scrap that does not contain motor vehicle scrap" compliance option, the Permittee certify that this scrap does not contain motor vehicle scrap.

[40 CFR §63.10685(b)(4)]

f. For the DEC system and the Melt Shop baghouse **(ID No. CD01)** the Permittee shall comply with the monitoring requirements of 15A NCAC 2D .0614 "Compliance Assurance Monitoring" found in Sections 2.1 A.5.c(i), above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart YYYYY if this monitoring is not conducted.

Recordkeeping [15A NCAC 2D .1111 and 40 CFR §63.10, 40 CFR §63.10685 and 40 CFR §63.10686]

g. For the DEC system and the Melt Shop baghouse **(ID No. CD01)** the Permittee shall comply with the recordkeeping requirements of 15A NCAC 2D .0614 "Compliance Assurance Monitoring" found in Section 2.1 A.5.c(ii), above. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart YYYYY if these records are not maintained.

h. The Permittee shall maintain records (written or electronic format) to demonstrate compliance with the requirements of Sections 2.1 A.6.d and e, above, and Sections 2.1 A.6.h(i) and (ii), below. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 and 40 CFR Part 63, Subpart YYYYY if the monitoring is not performed or if these records are not maintained. These records must be retained for at least 5 years and, at a minimum, the most recent 2 years of data must be retained on-site.
   i. For the scrap for which the Permittee has opted to comply with the mercury restrictions of the "site-specific plan for mercury switches" according to Section 2.1 A.6.e(i), above: records of the number of mercury switches removed from motor vehicle scrap sent to the Nucor Steel-Hertfort County Steel Mill or the weight mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered and examples of materials used for out-reach to suppliers; and
   ii. For the scrap for which the Permittee has opted to comply with the mercury restrictions of the "option for approved mercury programs" according to Section 2.1 A.6.e(ii), above: records identifying each scrap provider and documenting the scrap provider's participation in an EPA-approved mercury switch removal program. If the scrap was obtained from a broker, then the Permittee shall maintain records identifying each broker and documentation that all scrap provided by each broker was obtained from other scrap providers who participate in an EPA-approved mercury switch removal program.

Reporting [15A NCAC 2D .1111 and 40 CFR §63.10686 and 40 CFR §63.10690]

i. For the DEC system and the Melt Shop baghouse **(ID No. CD01)** the Permittee shall comply with the reporting requirements of 15A NCAC 2D .0614 "Compliance Assurance Monitoring" found in Section 2.1 A.5.d, above.

j. Within 30 days of a written request by the NC DAQ the Permittee shall submit examples of materials that are used for outreach to suppliers (e.g. letters, contract language, policies of purchasing agents, and scrap inspection protocols) for the scrap for which the Permittee has opted to comply with the mercury restrictions of 40 CFR Part 63, Subpart YYYYY via Sections 2.1 A.6.e(i) and (ii), above.

k. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. These semiannual summary reports must include:
   i. Clear identification of all instances of deviations from the requirements of this permit and the associated corrective actions taken;
   ii. Identification of which compliance option listed in Sections 2.1 A.6.e(i) through (iv), above, applies to each scrap provider, contract, or shipment; and
   iii. For the scrap for which the Permittee has opted to comply with the mercury restrictions of the "site-specific plan for mercury switches" according to Section 2.1 A.6.e(i), above:
      (A) The number of mercury switches removed or the weight mercury recovered from the switches;
      (B) The estimated number of vehicles processed;
      (C) An estimate of the percent of mercury switches recovered;
      (D) A certification that the recovered mercury switches were recycled at RCRA-permitted facilities; and
      (E) A certification that the Permittee has conducted inspections or taken other means of corroboration as required under Section 2.1 A.6.e(i)(B)(4), above
      (F) This information may be submitted in aggregated form and does not have to be submitted for each scrap provider, contract, or shipment.

B. Natural gas direct-fired Reheat Furnace (309 million Btu per hour maximum heat input rate; ID No. ES04)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20% opacity	15A NCAC 2D .0521
Various	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Toxic Air Pollutants	See Section 2.2 A **State-enforceable only**	15A NCAC 2D .1100
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the Reheat Furnace **(ID No. ES04)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in the Reheat Furnace **(ID No. ES04)**.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the Reheat Furnace **(ID No. ES04)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas in the Reheat Furnace **(ID No. ES04)**.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits for the Reheat Furnace **(ID No. ES04)** are as follows:

Pollutant	BACT Limits
$PM_{10}/PM_{2.5}$	2.40 pounds per hour
SO_2	0.18 pounds per hour
NO_2	Use of low-NOx burners
	0.128 pounds NOx per million Btu heat input
CO	26 pounds per hour
VOC	1.7 pounds per hour

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Pollutant	Pounds per Hour
$PM_{2.5}$	2.29
PM_{10}	2.29
NO_2	42.17

Testing [15A NCAC 2Q .0508(f)]

c. i. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the NO_X emission limit of 0.128 pounds per million Btu of heat input by testing the emissions from the Reheat Furnace (**ID No. ES04**) during the 2nd quarter of each calendar year.

If the performance tests for NOx for at least 2 consecutive years show that your emissions are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the process that could increase emissions, you may choose to conduct performance tests for NOx every third year. Each such performance test must be conducted no more than 37 months after the previous performance test.

If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit for NOx, you must conduct annual performance tests for NOx until all performance tests over a consecutive 2-year period are at or below 75% of the emissions limit.

ii. The capacity at which the annual testing is conducted shall be based on production records and shall be as approved by the DAQ, Washington Regional Office.

iii. The testing shall be performed in accordance with General Condition JJ found in Section 3, and a protocol approved by NC DAQ. At least forty-five (45) days prior to performing this required emissions testing, the Permittee shall develop and submit a testing protocol to the Washington Regional Supervisor, Division of Air Quality for review and approval.

iv. If the results of this test are above the limit of 0.128 pounds per million Btu of heat input, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Reporting [15A NCAC 2Q .0508(f)]

d. Within 30 days after conducting the testing required in Section 2.1 B.3.b, above, the Permittee shall submit a written report of the test results to the Washington Regional Office.

C. Railcar and/or truck unloading of lime (ID No. ES93A);

Railcar and/or truck unloading of injection carbon (ID No. ES93) and associated baghouse (1,000 square feet of filter area; ID No. CD05); and

Ten lime and/or injection carbon storage silos (ID Nos. ES17 through ES26) and four associated bin vent filters (117 square feet of filter area, each; ID No. CD02)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	$E = 55.0(P)^{0.11} - 40$ Where: E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
	Best Achievable Control Technology ≤ 0.01 grains per dry standard cubic foot from CD02	15A NCAC 2D .0530
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter (PM) from the railcar and/or truck unloading of injection carbon **(ID No. ES93)** shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

$E = 55.0(P)^{0.11} - 40$ Where: E = Allowable emission rate in pounds per hour
P = Process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for PM emissions from the railcar and/or truck unloading of injection carbon **(ID No. ES93)** since the estimated before control PM emissions are less than the allowable PM emission rate.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the lime and/or injection carbon storage silos **(ID Nos. ES17 through ES26)**, railcar and/or truck unloading of lime **(ID No. ES93A)**, and railcar and/or truck unloading of injection carbon **(ID No. ES93)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To assure compliance, once per semiannual reporting period (as defined in Section 2.1 C.2.e, below) the Permittee shall observe the emission points of the lime and/or injection carbon storage silos **(ID Nos. ES17 through ES26),** the railcar and/or truck unloading of lime **(ID No. ES93A),** and the railcar and/or truck unloading of injection carbon **(ID No. ES93)**, while unloading operations are being conducted, for any visible emissions above normal. The semiannual observations must be made for each semiannual period of the calendar year to ensure compliance with this requirement. If visible emissions from any of these sources are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 C.2.a above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a semiannual summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. Particulate matter emissions from the four bin vent filters (**ID No. CD02**) associated with the lime and/or injection carbon storage silos (**ID Nos. ES17 through ES26**) shall not exceed the "Best Available Control Technology" (BACT) permitted emission limit of **0.01 grains per dry standard cubic foot.**

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 C.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. To ensure that optimum particulate matter control efficiency is maintained by the four bin vent filters **(ID No. CD02)**, inspections and maintenance shall be performed as recommended by the manufacturer and or operating experience. A written or computer based program which details the scheduled maintenance and inspection activities shall be maintained and kept current. The defined activities shall be performed per a set schedule (daily through annually) with a method of tracking and recording the completion of each event.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these inspections and maintenance are not conducted or the records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

d. The Permittee shall submit a summary report of inspection and maintenance activities within 30 days of a written request by the DAQ.

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

D. Slag Handling Process (ID No. ES37)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter ($PM_{10}/PM_{2.5}$)	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Visible emissions	20 percent opacity per source	15A NCAC 2D .0521
Toxic Air Pollutants	See Section 2.2.A **State-enforceable only**	15A NCAC 2D .1100
Odorous emissions	See Section 2.2.B.1. **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the Slag Handling Process **(ID No. ES37)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 2Q .0508(f)]

c. To assure compliance, once per day the Permittee shall observe the emission points of the Slag Handling Process **(ID No. ES37)** for any visible emissions above normal. The daily observation must be made for each day of the calendar year period to ensure compliance with this requirement. The Permittee shall be allowed three (3) days of absent observations per semiannual period. If visible emissions from the Slag Handling Process **(ID No. ES37)** are observed to be above normal, the Permittee shall either:
   i. Take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. Demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 D.1.a above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. The date and time of each recorded action;
   ii. The results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. The results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) for the Slag Handling Process **(ID No. ES37)** is as follows:
   i. The permitted slag process throughput (as determined via the on-site truck scale) is 360,000 tons per consecutive 12-month period;
   ii. Apply wet suppression as necessary for slag cooling and for continuous fugitive particulate matter emissions control for slag handling, processing, and storage;
   iii. Limit drop heights from conveyor discharge to 15 feet; and
   iv. Limit drop heights from mobile equipment to secondary piles to 4 feet.

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Pollutant	Pounds per Hour
$PM_{2.5}$	0.26
PM_{10}	1.14

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 D.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

d. The Permittee shall perform monthly monitoring and recordkeeping of the tons of slag processed (as determined via the on-site truck scale) during that month and calculate the total slag processed for the 12-consecutive month period ending with that month.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if this monitoring is not conducted or the records are not maintained.

e. A wet suppression log shall be maintained daily, indicating areas and by time of day where water was applied and the quantity of water applied, along with a single notation of daily rainfall amounts. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. These reports shall include:
   i. Clear identification of all instances of deviations from the requirements of this permit; and
   ii. The total slag processed for each of the six 12-consecutive month periods ending during the reporting period.

E. Four cooling towers: one two-cell cooling tower with a maximum flow rate of 3,000 gallon per minute (ID No. ES102), routed to a mist eliminator with a 0.005 percent drift loss (ID No. CD08);

One two-cell contact cooling tower with a maximum flow rate of 25,000 gallon per minute (ID No. ES38), routed to a mist eliminator with a 0.008 percent drift loss (ID No. CDME38);

One five-cell non-contact cooling tower with a maximum flow rate of 95,000 gallons per minute (ID No. ES39), routed to a mist eliminator with a 0.008 percent drift loss (ID No. CDME39); and

One one-cell contact air compressor cooling tower with a maximum flow rate of 5,646 gallon per minute, routed to a mist eliminator with a 0.008 percent drift loss (ID No. CDME40)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Particulate matter ($PM_{10}/PM_{2.5}$)	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Odorous emissions	See Section 2.2.B.1. **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these cooling towers **(ID Nos. ES38 through ES40 and ES102)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from these cooling towers **(ID Nos. ES38 through ES40 and ES102)**.

2. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) for the Cooling Towers **(ID Nos. ES38, ES39 and ES40)** is as follows: the Permittee shall not operate the Cooling Towers **(ID Nos. ES38, ES39 and ES40)** without the concurrent operation of the associated mist eliminators **(ID Nos. CDME38, CDME39, CDME40)** with **a 0.008 percent drift loss**.

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Cooling Tower (ID No. ES38)	$PM_{2.5}$	0.18
	PM_{10}	0.30

Emission Source	Pollutant	Pounds per Hour
Cooling Tower (ID No. ES39)	$PM_{2.5}$	0.34
	PM_{10}	0.57
Cooling Tower (ID No. ES40)	$PM_{2.5}$	0.04
	PM_{10}	0.07

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

d. Once each calendar year, the physical condition of the mist eliminators **(ID Nos. CDME38, CDME39, CDME40)** must be checked. In a logbook (written or electronic format), the date of the inspection shall be entered and a summary of any actions taken. The logbook shall be made available to an authorized DAQ representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these inspections are not conducted or the records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. No reporting is required for particulate matter emissions from these cooling towers **(ID Nos. ES38 through ES40)**.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) for the Cooling Tower **(ID Nos. ES102)** is as follows: The Permittee shall not operate the Cooling Tower **(ID Nos. ES102)** without the concurrent operation of the associated mist eliminator **(ID No. CD089)** with a **0.005 percent drift loss**.

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Cooling Tower (ID No. ES102)	$PM_{2.5}$	0.003
	PM_{10}	0.006

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 E.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

d. Once each calendar year, the physical condition of the mist eliminator **(ID No. CD08)** must be checked. In a logbook (written or electronic format), the date of the inspection shall be entered and a summary of any actions taken. The logbook shall be made available to an authorized DAQ representative upon request.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these inspections are not conducted or the records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. No reporting is required for particulate matter emissions from this cooling tower **(ID No. ES102)**.

F. Unpaved Roads (ID No. ES41)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter ($PM/PM_{10}/PM_{2.5}$)	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Fugitive dust	Shall not cause or contribute to substantive complaints	15A NCAC 2D .0540
Visible emissions	Visible emissions (Method 22) must not be observed beyond the property boundary for six minutes or more in any hour	

1. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) for continuous control of fugitive dust emissions from Unpaved Roads (**ID No. ES41**) is comprised of the following work practices:
   i. Periodic application of water, chemical dust suppressants, or mill scale to unpaved roadways; and
   ii. Posted speed limit signs of 10 miles per hour.

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Unpaved Roads (ID No. ES41)	$PM_{2.5}$	0.16
	PM_{10}	1.59

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. A wet suppression log shall be maintained daily, indicating areas and by time of day where water, chemical dust suppressants, or mill scale were applied and the quantity that was applied, along with a single notation of daily rainfall amounts.
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if these records are not maintained.

d. The Permittee shall post speed limit signs at appropriate intervals on all unpaved haul roads and inspect and maintain those speed limit signs as necessary.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0540: PARTICULATES FROM FUGITIVE DUST EMISSION SOURCES

a. The Permittee shall not cause or allow fugitive dust emissions from unpaved roads **(ID No. ES41)** cause or contribute to substantive complaints (i.e., complaints that are verified by physical evidence) or visible emissions in excess of those allowed under 15A NCAC 2D .0540(e).

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

b. To assure compliance, the Permittee shall comply with the requirements of Section 2.1 F.1.a, above, for fugitive dust emissions and visible emissions from the unpaved roads **(ID No. ES41)**.

G. [reserved]

H. The following internal combustion sources:

Emission Source ID No.	Emission Source Description	Maximum Power Output Rating (kW)	Class[a]		Service Mode[b]	Location
Stationary Compression Ignition Engines						
ES80	Diesel fuel-fired emergency generator	2,000	Existing (MACT)	<07/11/05	Emergency	Caster – PS2
ES81	Diesel fuel-fired emergency generator	2,000	Existing (MACT)	<07/11/05	Emergency	North water system– PS3
ES82	Diesel fuel-fired emergency generator	2,000	Existing (MACT)	<07/11/05	Emergency	South water system – PS4
ES86	Diesel fuel-fired emergency generator	90	Existing (MACT)	<07/11/05	Emergency	Sewage pump station
ES87	Diesel fuel-fired emergency water pump	130	Existing (MACT)	<07/11/05	Emergency	Reheat furnace
ES88	Diesel fuel-fired emergency water pump	180	Existing (MACT)	<07/11/05	Emergency	EAF & LMF
ES89	Diesel fuel-fired emergency water pump	110	Existing (MACT)	<07/11/05	Emergency	Not currently installed
ES90	Diesel fuel-fired emergency water pump	630	Existing (MACT)	<07/11/05	Emergency	Emergency fire pump
ES107	Diesel fuel-fired radio tower generator	20	New (MACT, NSPS)	>06/12/06 >01/01/09	Emergency	Radio tower
Stationary Spark Ignition Engines						
ES84	Natural gas-fired emergency generator	250	Existing (MACT)	<06/12/06	Emergency	Oxygen plant
ES103	Natural gas-fired emergency generator	131	New (MACT) [c]	>06/12/06 <01/01/09	Emergency	IT – between engineering and gym
ES104	Natural gas-fired emergency generator	300	New (MACT, NSPS)	>06/12/06 >01/01/09	Emergency	Q&T east wall
ES105	Natural gas-fired emergency generator	300	New (MACT, NSPS)	>06/12/06 >01/01/09	Emergency	Q&T east wall
ES116	Natural gas-fired emergency generator (4.1 million Btu per hour heat input rate)	300	New (MACT, NSPS)	>06/12/06 >01/01/09	Emergency	Normalizing west wall
ES210	Natural gas-fired emergency generator	450	New (MACT, NSPS)	>06/12/06 >01/01/09	Emergency	Oxygen plant

[a] An engine is existing or new depending on specified dates within the MACT and NSPS standards. Engines that are classified as existing under the MACT are not subject to the NSPS.
[c] This engine was installed prior to January 1, 2009, and does not have requirements under the NSPS.

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutants	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
NOx, CO, PM, NMHC and sulfur content	**ES107 Only** - See condition 2.1 H.4	15A NCAC 2D .0524 [40 CFR Part 60, Subpart IIII]

Regulated Pollutants	Limits/Standards	Applicable Regulation
NOx, CO, and VOCs	**ES104 and ES105** - See condition 2.1 H.5 **ES116 and ES210** - See condition 2.1 H.6	15A NCAC 2D .0524 [40 CFR Part 60, Subpart JJJJ]
Various	**Operating Limit for ES80 through ES82, ES84, and ES86 through ES90** Best Achievable Control Technology Operation limited to 100 hours of operation per 12-consecutive month period for each affected RICE	15A NCAC 2D .0530
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 A1. See Section 2.2 C.1 **for ES107 only**	15A NCAC 2D .1100
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 2D .1111 [40 CFR Part 63, Subpart ZZZZ]
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the emergency generators and emergency water pumps **(ID Nos. ES80 through ES82, ES84, ES86 through ES90, ES103 through ES105, ES107, ES116, and ES210)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 H.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the emergency generators and emergency water pumps **(ID Nos. ES80 through ES82, ES84, ES86 through ES90, ES103 through ES105, ES107, ES116, and ES210)**.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the emergency generators, emergency water pumps, and radio tower generator **(ID Nos. ES80 through ES82, ES84, ES86 through ES90, ES103 through ES105, ES107, ES116, and ES210)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 H.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the emergency generators, emergency water pumps, and radio tower generator **(ID Nos. ES80 through ES82, ES84, ES86 through ES90, ES103 through ES105, ES107, ES116, and ES210)**.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) requirement for emergency RICE (**ID Nos. ES80, ES81, ES82, ES84, and ES86 through ES90, ES103 through ES 105, ES107, ES116, and ES210**) is to comply with the Part 60 and Part 63 requirements.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

b. The Permittee shall perform monthly monitoring and recordkeeping a specified in 2.1 H. 4, 5, 6, 7, and 8 below. Records shall be maintained in a logbook (written or electronic format) onsite and made available for inspection by authorized officials.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if this monitoring is not performed or if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

c. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. These reports shall include:
   i. Clear identification of all instances of deviations from the requirements of this permit.

4. 15A NCAC 2D .0524: NSPS, STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES [40 CFR 60 Subpart IIII] (for non-emergency internal combustion engines)

Applicability [15A NCAC 2Q .0508(f), 40 CFR 60.4200(a)(2)]

a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, including Subpart A "General Provisions" for the radio tower generator **(ID No. ES107).**

General Provisions [15A NCAC 2Q .0508(f)]

b. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 8 of 40 CFR 60 Subpart IIII. [40 CFR 60.4218]

Emission Standards [15A NCAC 2Q .0508(f)]

c. The Permittee shall comply with the following emission standards for the new compression ignition (CI) engine **(ID No. ES107)** in 40 CFR 60.4201, for all pollutants, for the same model year and maximum engine power for this engine. [40 CFR 60.4204(b) and 40 CFR 89.112(a)]

NMHC and NO_X:	7.5 g/kW-hr;
CO:	5.5 g/kW-hr; and
PM:	0.6 g/kW-hr;

Fuel Requirements [15A NCAC 2Q .0508(f)]

d. The Permittee shall use diesel fuel in the engine **(ID No. ES107)** with:
   i. a maximum sulfur content of 15 ppm; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.
   [40 CFR 60.4207 (b), and 40 CFR 80.510 (b)]

Testing [15A NCAC 2Q .0508(f)]

e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limits given in Sections 2.1 H.4.c and d. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Compliance Requirements [15A NCAC 2Q .0508(f)]

f. The Permittee shall:
   i. operate and maintain the engine **(ID No. ES107)** in accordance with the manufacturer's written instructions over the entire life of the engine.
   ii. The Permittee may only change engine settings that are permitted by the manufacturer.
   iii. The Permittee shall also meet the requirements of 40 CFR 89, 94 and/or 1068 as applicable.
   [40 CFR 60.4206 and 60.4211(a)]

g. The Permittee shall comply with the emission standards specified Section 2.1 H.4.c, above, by purchasing an engine certified to the emission standards in Section 2.1 H.4.c. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the compliance requirements above are not met.

Recordkeeping [15A NCAC 2Q .0508(f)]

h. To assure compliance, the Permittee shall perform inspections and maintenance on the engine **(ID No. ES107)** as recommended by the manufacturer according to Section 2.1 H.4.f, above. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the engine; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.
   [40 CFR 60.4206 and 60.4211(a)]

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit shall be clearly identified.

5. 15A NCAC 2D .0524: NSPS, STANDARDS OF PERFORMANCE FOR STATIONARY SPARK IGNITION INTERNAL COMBUSTION ENGINES [40 CFR 60 Subpart JJJJ]
(For non-emergency IC engines)

Applicability [15A NCAC 2Q .0508(f), 40 CFR 60.4230(a)(4)(iii)]

a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart JJJJ**,** including Subpart A "General Provisions" for two natural gas-fired emergency generators **(ID Nos. ES104 and ES105)**.

General Provisions [15A NCAC 2Q .0508(f)]

b. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60 .4246]

Emission Standards [15A NCAC 2Q .0508(f)]]

c. The Permittee shall comply with the following emission standards for the natural gas-fired emergency generators **(ID Nos. ES104 and ES105).**
[40 CFR 60.4233(e), 40 CFR 60 Table 1 to subpart JJJJ]

Engine type	Maximum engine power	Manufacture date (*after*)	Emission standards ppmvd @ 15% O_2		
			NO_x	CO	VOC
Non-Emergency* SI, Natural Gas	100<=HP<=500	7/1/2008	160	540	86

*although these engines are used for emergency service, they will comply with the more stringent non-emergency service requirements.

Testing [15A NCAC 2Q .0508(f)]]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 H.5.c, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Monitoring [15A NCAC 2Q .0508(f)]

e. There are no monitoring requirements for the two natural gas-fired emergency generators **(ID Nos. ES104 and ES105).**

Compliance Requirements [15A NCAC 2Q .0508(b)]

f. The Permittee shall comply with the emission standards in Section 2.1 H.5.c, above, by purchasing an engine certified according to the procedures in 40 CFR 60 Subpart JJJJ for the 2010 model year.

The Permittee shall operate and maintain the natural gas-fired emergency generators **(ID Nos. ES104 and ES105)** according to the manufacturer's emission-related written instructions.
The Permittee shall also meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as they apply.

If the engine settings are adjusted according to and consistent with the manufacturer's instructions, the natural gas-fired emergency generators **(ID Nos. ES104 and ES105)** will not be considered out of compliance.

[40 CFR 60 .4243(b)(1) and (a)(1)]

g. The Permittee shall operate and maintain the natural gas-fired emergency generators **(ID Nos. ES104 and ES105)** that achieve the emission standards as required in Section 2.1 H.5.c, above, over the entire life of the engines. [40 CFR 60.4234]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the compliance requirements above are not met.

Recordkeeping [15A NCAC 2Q .0508(f)]

h. The Permittee shall keep the following records:
   i. All notifications submitted to comply with 40 CFR 60 and all documentation supporting any notification.
   ii. Maintenance conducted on the engine.
   iii. Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
   [40 CFR 60.4245(a), 60.4243(a)(1) and (b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if these recordkeeping requirements are not met.

Reporting [15A NCAC 2Q .0508(f)]

i. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit shall be clearly identified.

The Permittee shall be deemed in noncompliance with the reporting requirements of15A NCAC 2D .0524 if these reporting requirements are not met.

6. 15A NCAC 2D .0524: NSPS, STANDARDS OF PERFORMANCE FOR STATIONARY SPARK IGNITION INTERNAL COMBUSTION ENGINES [40 CFR 60 Subpart JJJJ]
(For Emergency Engines)

Applicability [15A NCAC 2Q .0508(f), 40 CFR 60.4230(a)(4)(iii)]

a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart JJJJ**,"** including Subpart A "General Provisions" for the natural gas-fired emergency generators **(ID Nos. ES116 and ES210)**.

General Provisions [15A NCAC 2Q .0508(f)]

b. The Permittee shall comply with the General Provisions of 40 CFR 60 Subpart A as presented in Table 3 of 40 CFR 60 Subpart JJJJ. [40 CFR 60.4246]

Emission Standards [15A NCAC 2Q .0508(f)]]

c. The Permittee shall comply with the following emission standards. [40 CFR 60.4233(e), 40 CFR 60 Table 1 to subpart JJJJ]

Engine type	Maximum engine power	Manufacture date *(after)*	Emission standards ppmvd @ 15% O_2		
			NO_x	CO	VOC
Emergency	HP>=130	1/1/2009	160	540	86

Testing [15A NCAC 2Q .0508(f)]]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limits given in Section 2.1 H.6.c, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

Monitoring [15A NCAC 2Q .0508(f)]

e. The emergency generators **(ID Nos. ES116 and ES210)** shall be equipped with a non-resettable hour meter. [40 CFR 60 .4237(b)]

Compliance Requirements [15A NCAC 2Q .0508(b)]

f. The Permittee shall comply with the emission standards in condition c. by purchasing an engine certified to the emission standards in Section 2.1 H.6.c, above, for the appropriate model year. [40 CFR 60.4243(b)(1)]

g. The Permittee shall operate and maintain the emergency generators **(ID Nos. ES116 and ES210)** according to the manufacturer's emission-related written instructions. The Permittee shall also meet the requirements as specified in 40 CFR Part 1068, subparts A through D, as they apply. If the engine settings are adjusted according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(a)(1), (b)(1)]

h. The Permittee shall operate and maintain the emergency generators **(ID Nos. ES116 and ES210)** that achieve the emission standards as required in Section 2.1 H.6.c, above, over the entire life of the engine. [40 CFR 60.4234]

i. In order for the emergency generators **(ID Nos. ES116 and ES210)** to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii) of below, is prohibited. If the engine is not operated according to the requirements in paragraphs (i) through (iii) below, the engine will not be considered an emergency engine under this permit condition and must meet all requirements for non-emergency engines.
   i. There is no time limit on the use of the emergency generators **(ID Nos. ES116 and ES210)** in emergency situations.
   ii. The Permittee may operate the emergency generators **(ID Nos. ES116 and ES210)** for any combination of the purposes specified in paragraphs (ii)(A) through (C) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (iii) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (ii).
      (A) The emergency generators **(ID Nos. ES116 and ES210)** may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the DAQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains

records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(B) The emergency generators **(ID Nos. ES116 and ES210)** may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(C) The emergency generators **(ID Nos. ES116 and ES210)** may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

iii. The emergency generators **(ID Nos. ES116 and ES210)** may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (ii) of this condition. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 60.4243(d)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the compliance requirements above are not met.

Recordkeeping [15A NCAC 2Q .0508(f)]

j. The Permittee shall keep the following records:
   i. All notifications submitted to comply with 40 CFR 60 and all documentation supporting any notification.
   ii. Maintenance conducted on the emergency generators **(ID Nos. ES116 and ES210)**.
   iii. Documentation from the manufacturer that the emergency generators **(ID Nos. ES116 and ES210)** is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
   iv. The hours of operation of the emergency generators **(ID Nos. ES116 and ES210)** that is recorded through the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[40 CFR 60.4245(a), (b) and 60.4243(a)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524, if the recordkeeping requirements above are not met.

Reporting [15A NCAC 2Q .0508(f)]

k. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance with the requirements of this permit must be clearly identified.

l. If the emergency generators **(ID Nos. ES116 and ES210)** operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Section 2.1 H.6.i(ii)(B) and (C) or that operates for the purposes specified in Section 2.1 H.6.i(iii)(A), above, the Permittee shall

submit an annual report according to the requirements at 40 CFR 60.4245(e). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 60.4245(e)]

7. 15A NCAC 2D .1111: 40 CFR part 63, subpart ZZZZ, "NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES"
(Existing engines constructed before June 12, 2006 located at area sources)

Applicability [40 CFR 63.6585, 63.6590]

a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ for eight diesel fuel-fired emergency generators and emergency water pumps **(ID Nos. ES80 through ES82, and ES86 through ES90)** and one natural gas-fired emergency generator **(ID No. ES84).**

Definitions and Nomenclature

b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Compliance Date [40 CFR 63.6595(a)(1)]

c. The Permittee shall comply with the applicable requirements by the following dates:
   i. For the eight diesel fuel-fired emergency generators and water pumps **(ID Nos. ES80 through ES82, and ES86 through ES90),** no later than May 3, 2013.
   ii. For the natural gas-fired emergency generator (**ID No. ES84**), no later than October 19, 2013.

Notifications [40 CFR 63.6645(a)(5)]

d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ

Operating and Maintenance Requirements [15A NCAC 2Q .0508(b)]

f. During periods of startup of each emergency generator and emergency water pump **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)**, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

g. Except during periods of startup of each emergency generator and emergency water pump **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)**, the Permittee shall comply with the following operational requirements.
   i. For each diesel fuel-fired emergency generator and emergency water pump **(ID Nos. ES80 through ES82 and ES86 through ES90),** the Permittee shall comply with the following:
      (A) Change oil and filter every 500 hours of operation or annually, whichever comes first;
      (B) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
      (C) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

ii. For the natural gas-fired emergency generator **(ID No. ES84)**, the Permittee shall comply with the following:
(A) Change oil and filter every 500 hours of operation or annually, whichever comes first;
(B) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
(C) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
[40 CFR 63.6603(a), Table 2d]

h. For each diesel fuel-fired emergency generator and emergency water pump **(ID Nos. ES80 through ES82 and ES86 through ES90)**, the Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in Section 2.1 H.7.g(i). [40 CFR 63.6603(a), Table 2d ,63.6625(i)]

i. If one of the emergency generators or water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Section 2.1 H.7.g(i) or (ii), or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The Permittee shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6603(a), Table 2d]

j. The Permittee shall be in compliance with the emission limitations and operating limitations that apply at all times for each emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)**. [40 CFR 63.6605(a)]

k. The Permittee shall operate and maintain emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

l. The Permittee shall operate and emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6]

m. In order for the emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** to be considered emergency stationary RICE under this condition, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (i) through (iii) below, is prohibited.

(i) There is no time limit on the use of the emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** in emergency situations.

(ii) The Permittee may use the emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** for any combination of the purposes specified in paragraphs (A) through (C) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (iii) below counts as part of the 100 hours per calendar year allowed by this paragraph (ii).

(A) The emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.
The Permittee may petition the DAQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(B) The emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.

(C) The emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(iii) The emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in Section 2.1 H.7.m(ii), above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the operating and maintenance requirements above are not met.

Monitoring [15A NCAC 2Q .0508(f)]

n. The Permittee shall install a non-resettable hour meter on each emergency generator and water pump **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 2Q .0508(f)]

o. The Permittee shall keep the following:
   i. A copy of each notification and report submitted to comply with this Section 2.1 H.7, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).[40 CFR 63.6655(a)(1)]
   ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]

iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with Section 2.1 H.7.k, above, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
v. Records of the maintenance conducted on the emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** pursuant to Section 2.1 H.7.l, above. [40 CFR 63.6655(d) and (e)]
vi. Records of the hours of operation of each emergency generator and water pump **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES86 through ES90)** are used for the purposes specified in Section 2.1 H.7.m(ii)(B) or (C) or H.7.m(iii)(B), above, the Permittee must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]

p. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a),(b),(c)]
The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the recordkeeping requirements are not met.

Reporting [15A NCAC 2Q .0508(f)]

q. The Permittee shall submit a summary report of monitoring, recordkeeping activities, any reporting required under Section 2.1 H.7.i, above, as necessary, postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6603(a), Table 2d, 63.6640(b),(e), and 63.6650(f)]

r. If the emergency generators and water pumps **(ID Nos. ES80 through ES82, ES84, and ES87 through ES90)** that operate or are contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in Section 2.1 H.7.m(ii)(B) and (C) or H.7.m(iii)(B), above, the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)]

The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 2D .1111 if these reporting requirements above are not met.

8. 15A NCAC 2D .1111: 40 CFR part 63, subpart ZZZZ, "NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES" (New internal combustion engines located at area sources)

Applicability [40 CFR 63.6585, .6590(a)(2)]

a. The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, Subpart ZZZZ for five natural gas-fired emergency generators **(ID Nos. ES103 through ES105, ES116, and ES210)** and one diesel fuel-fired emergency generator **(ID No. ES107)**.

Stationary RICE subject to Regulations under 40 CFR Part 60

b. Pursuant to 40 CFR 63.6590(c), the natural gas-fired emergency generators (**ID Nos. ES103 through 105, ES116 and ES210**) shall meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR Part 60 subpart JJJJ. No further requirements apply for these engines under 40 CFR 63. However, one emergency generator (**ID No. ES103**) was manufactured prior to January 1, 2009, and pursuant to 40 CFR 60.4230(a)(4)(iv), this emergency generator is not subject to any requirements under 40 CFR Part 60, Subpart JJJJ.

c. Pursuant to 40 CFR 63.6590(c), the diesel fuel-fired emergency generator (**ID No. ES107**) shall meet the requirements of 40 CFR 63 by meeting the requirements of 40 CFR Part 60 Subpart IIII. No further requirements apply for this engine under 40 CFR 63. If the requirements in Section 2.1 H.8.a through c, above, are not met, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111.

I. Q&T Line: Ten natural gas/oxyfuel-fired torches with a total heat input rate of 0.4 million Btu hour (ID No. ES98) and eight natural gas/oxyfuel-fired torches and two plasma torches with a total heat input rate of 0.32 million Btu per hour (ID No. ES99) and associated cartridge filter (ID No. CD07)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Various	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Toxic Air Pollutants	See Section 2.2 A **State-enforceable only**	15A NCAC 2D .1100
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the Q&T line torches **(ID Nos. ES98 and ES99)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 I.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the Q&T line torches **(ID Nos. ES98 and ES99)**.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the torches **(ID Nos. ES98 and ES99)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 I.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of the Q&T line torches **(ID Nos. ES98 and ES99)** for any visible emissions above normal. The monthly observation shall be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:

i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 I.2.a, above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from these Q&T line torches **(ID Nos. ES98 and ES99)** are as follows:

Pollutant	BACT limits
$PM_{10}/PM_{2.5}$	Use of cartridge filter system (ID No. CD07)
	99.99% control efficiency
SO_2:	Good Combustion Practices
	0.0006 pounds per million Btu heat input
NO_2	Good Combustion Practices
	0.1 pounds NOx per million Btu heat input (oxyfuel mode)
	0.97 pounds NOx per hour per torch (plasma mode)
CO	Good Combustion Practices
	0.084 pounds per million Btu heat input
VOC	Good Combustion Practices
	0.0055 pounds per million Btu heat input

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Q&T Line Torches (ID Nos. ES98 and ES99)	$PM_{2.5}$	0.005
	PM_{10}	0.005
	NO_2	0.04

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with 15A NCAC 2Q .0508(f) and General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 I.3.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the Q&T line torches **(ID Nos. ES98 and ES99)** shall be controlled by the cartridge filter. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the cartridge filter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the ductwork and cartridge filters are not inspected and maintained.

e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the cartridge filters within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

J. The natural gas-fired normalizing furnace with a maximum heat input capacity of 29.8 million Btu per hour (ID No. ES117)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For process weights up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ For process weights greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$ Where: E = Allowable emission rate in pounds per hour, P = Process weight in tons per hour	15A NCAC 2D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20% opacity	15A NCAC 2D .0521
Toxic Air Pollutants	See Section 2.2.C.1. **State-enforceable only**	15A NCAC 2D .1100
Odorous emissions	See Section 2.2.B.1. **State-enforceable only**	15A NCAC 2D .1806
Various	Best Available Control Technology Analysis	15A NCAC 2D .0530

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the normalizing furnace (**ID No. ES117)** shall not exceed an allowable emission rate as calculated by one of the following equation: [15A NCAC 2D .0515(a)]

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.1.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for the normalizing furnace **(ID No. ES117)**.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the normalizing furnace **(ID No. ES117)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in the normalizing furnace **(ID No. ES117)**.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a**.** Visible emissions from the normalizing furnace **(ID No. ES117)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas in the normalizing furnace **(ID No. ES117)**.

4. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted work practices for the normalizing furnace **(ID No. ES117)** are as follows:

Pollutant	BACT limits
Various	Use of natural gas as fuel with low NOx burners
	Good combustion practices

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 K.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required.

K. One vacuum degasser with a maximum production capacity of 317.5 metric tons steel per hour (ID No. ES100)

The following table provides a summary of limits and/or standards for the emission source above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Various	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Odors	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the vacuum degasser **(ID No. ES100)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 02D .0516]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 K.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in the vacuum degasser.

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the vacuum degasser **(ID No. ES100)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.
[15A NCAC 02D .0521 (d)]

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 K.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a week the Permittee shall observe the emission points of the vacuum degasser **(ID No. ES100)** for any visible emissions above normal. The weekly observation shall be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from vacuum degasser **(ID No. ES100)** are observed to be above normal, the Permittee shall either:

i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 K.2.a, above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from this source are as follows:

Pollutant	BACT limits
$PM_{10}/PM_{2.5}$	0.008 grains/dscf
SO_2	0.005 pounds per metric ton steel processed
NO_2	0.005 pounds per metric ton steel processed
CO	0.075 pounds per metric ton steel processed
VOC	0.005 pounds per metric ton steel processed

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Vacuum degasser (ID Nos. ES100)	$PM_{2.5}$	0.452
	PM_{10}	0.452
	NO_2	1.59

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 K.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

d. No monitoring, recordkeeping, or reporting is required.

L. The Shot Blaster (ID No. ES95) and associated bagfilter (2:1 gas/cloth ratio, ID No. CD06)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 2D .0521
Particulate matter ($PM/PM_{10}/PM_{2.5}$)	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the shot blaster **(ID No. ES95)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 L.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. To assure compliance, once a week the Permittee shall observe the emission points of the shot blaster **(ID No. ES95)** for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for the shot blaster **(ID No. ES95)** in the first 30 days following July 21, 2014. If visible emissions from this source are observed to be above normal, the Permittee shall either:

i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. demonstrate that the percent opacity from the emission points of the shot blaster **(ID No. ES95)** in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 L.1. a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

i. the date and time of each recorded action;

ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and

iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from the shot blaster **(ID No. ES95)** are as follows:

Pollutant	BACT limits
$PM_{10}/PM_{2.5}$ (filterable and condensable)	Use of bagfilter control system (CD06)
	99% control efficiency

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Shot Blaster (ID Nos. ES95)	$PM_{2.5}$	0.14
	PM_{10}	0.14

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 L.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

d. Particulate matter emissions from the shot blaster **(ID No. ES95)** shall be controlled by the bagfilter **(ID No. CD06)**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12-month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the ductwork and bag filter are not inspected and maintained.

e. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the bag filter within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

M. One natural gas-fired austentizing furnace with a maximum heat input capacity of 36 million Btu per hour maximum (ID No. ES96) and one natural gas-fired tempering furnace with a maximum heat input capacity of 37 million Btu per hour (ID No. ES97)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20% opacity	15A NCAC 2D .0521
Various	Best Achievable Control Technology NAAQS and Increment Modeled Rates	15A NCAC 2D .0530
Toxic Air Pollutants	See Section 2.2.A **State-enforceable only**	15A NCAC 2D .1100
Odorous emissions	See Section 2.2.B.1. **State-enforceable only**	15A NCAC 2D .1806

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these furnaces **(ID Nos. ES96 and ES97)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 M.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in these furnaces **(ID Nos. ES96 and ES97)**.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 M.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas in these furnaces **(ID Nos. ES96 and ES97)**.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits for these sources are as follows:

Emission Source	Pollutant	BACT Limits
Natural gas-fired austenitizing furnace (ES96)	$PM_{10}/PM_{2.5}$	Good Combustion Practices
		0.0076 pound per million Btu heat input
	SO_2:	Good Combustion Practices
		0.0006 pound per million Btu heat input
	NO_2	Good Combustion Practices
		0.211 pound NOx per million Btu heat input
	CO	Good Combustion Practices
		0.084 pound per million Btu heat input
	VOC	Good Combustion Practices
		0.0055 pound per million Btu heat input
Natural gas-fired tempering furnace (ES 97)	$PM_{10}/PM_{2.5}$	Good Combustion Practices
		0.0076 pound per million Btu heat input
	SO_2:	Good Combustion Practices
		0.0006 pound per million Btu heat input
	NO_2	Good Combustion Practices
		0.0702 pound NOx per million Btu heat input
	CO	Good Combustion Practices
		0.084 pound per million Btu heat input
	VOC	Good Combustion Practices
		0.0055 pound per million Btu heat input

b. The following limits are required in order to demonstrate compliance with the National Ambient Air Quality Standards and the PSD increments as required by 15A NCAC 2D .0530; 40 CFR 51.166(k):

Emission Source	Pollutant	Pounds per Hour
Natural gas-fired austenitizing furnace (ES96)	$PM_{2.5}$	0.533
	PM_{10}	0.533
	NO_2	3.51
Natural gas-fired tempering furnace (ES97)	$PM_{2.5}$	0.562
	PM_{10}	0.562
	NO_2	5.20

Testing [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 M.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

d. No monitoring, recordkeeping, or reporting is required for these furnaces **(ID Nos. ES96 and ES97)**.

N. The group of natural gas-fired space heaters, process water heaters, air makeup heaters (ID No. TES02); the air separator unit natural gas-fired heater (ID No. TES17); and the natural gas-fired natural gas pipeline heater with a maximum heat input rate of 0.75 million Btu per hour (ID No. TES21)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20% opacity	15A NCAC 2D .0521
Toxic Air Pollutants	See Section 2.2.C.1 **State-enforceable only**	15A NCAC 2D .1100

1. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from these heaters **(ID Nos. TES02, TES17, and TES21)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 N.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in these heaters **(ID Nos. TES02, TES17, and TES21)**.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these heaters **(ID Nos. TES02, TES17, and TES21)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 N.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas in these heaters **(ID Nos. TES02, TES17, and TES21)**.

O. The normalizing line: one plasma shear with a maximum heat input capacity of 0.32 million Btu per hour (ID No. ES108) and one plasma torch with a maximum heat input capacity 0.32 million Btu per hour (ID No. ES109) with associated bagfilter (2.1:1 maximum air to cloth ratio, ID No. CD09); and

One plasma shear with a maximum heat input capacity of 0.32 million Btu per hour (ID No. ES110) and one plasma torch with a maximum heat input capacity of 0.32 million Btu per hour (ID No. ES111) with associated bagfilter (2.1:1 maximum air to cloth ratio, ID No. CD10)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For process weights up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ For process weights greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$ Where: E = Allowable emission rate in pounds per hour; P = Process weight in tons per hour	15A NCAC 2D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
Visible emissions	20% opacity	15A NCAC 2D .0521
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806
Toxic Air Pollutants	See Section 2.2.C.1. **State-enforceable only**	15A NCAC 2D .1100
Various	Best Available Control Technology	15A NCAC 2D .0530

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the plasma shears **(ID Nos. ES108 and ES110)** and plasma torches **(ID Nos. ES109 and ES111)** shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 O.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the plasma shears **(ID Nos. ES108 and ES110)** and plasma torches **(ID Nos. ES109 and ES111)** shall be controlled by the bagfilters as indicated above **(ID Nos. CD09 and CD10)**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the plasma shears **(ID Nos. ES108 and ES110)** and plasma torches **(ID Nos. ES109 and ES111)** shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 O.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in the plasma shears **(ID Nos. ES108 and ES110)** and plasma torches **(ID Nos. ES109 and ES111).**

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the plasma shears **(ID Nos. ES108 and ES110)** and plasma torches **(ID Nos. ES109 and ES111)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 O.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a month the Permittee shall observe the emission points of the plasma shears **(ID Nos. ES108 and ES110)** and plasma torches **(ID Nos. ES109 and ES111)** for any visible emissions above normal. The monthly observation shall be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 O.3.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from the above sources are as follows:

Source	BACT Limit, PM10/PM2.5
Plasma shear – normalizing line (ES108)	5.49E-04 pounds per hour
Plasma torch – normalizing line (ES109)	5.49E-04 pounds per hour
Plasma shear – Q&T line (ES110)	5.49E-04 pounds per hour
Plasma torch – Q&T line (ES111)	5.49E-04 pounds per hour

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.2 O.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. The facility shall conduct monitoring, recordkeeping and reporting as specified in 2.1 O.1 above.

5. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted work practices for the normalizing furnace **(ID No. ES117)** are as follows:

Pollutant	BACT limits
Various gaseous	Use of natural gas as fuel with low NOx burners
	Good combustion practices

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 O.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required.

P. The shot blaster in the heat treat facility (ID No. ES115) and associated bagfilter (2.1:1 maximum air to cloth ratio, ID No. CD14)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For process weights up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ For process weights greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$ Where: E = Allowable emission rate in pounds per hour; P = Process weight in tons per hour	15A NCAC 2D .0515
Visible emissions	20% opacity	15A NCAC 2D .0521
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806
PM_{10} and $PM_{2.5}$	Best Available Control Technology	15A NCAC 2D .0530

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the shot blaster (**ID No. ES115)** shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$

Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 P.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the shot blaster (**ID No. ES115)** shall be controlled by the bagfilter as indicated above **(ID No. CD14)**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the shot blaster (**ID No. ES115)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 P.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a week the Permittee shall observe the emission point of the shot blaster (**ID No. ES115)** for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from this source are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
   ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 P.2.a, above.

   If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from the above sources are as follows:

Source	BACT Limit, PM10/PM2.5
Shot blaster (ES115)	1.35E-01 pounds per hour

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.2 P.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. The facility shall conduct monitoring, recordkeeping and reporting as specified in 2.1 P.1 above.

Q. DRI Handling operations: DRI barge receiving hopper (ID No. ES112) and associated bagfilter (3.9:1 maximum air to cloth ratio, ID No. CD11);

DRI storage silos (ID Nos. ES113A and ES113B) and associated bagfilter (3.9:1 maximum air to cloth ratio, ID No. CD12); and

DRI day bins (ID No. ES114) and associated bagfilter (3.9:1 maximum air to cloth ratio, ID No. CD13)

The following provides a summary of limits and/or standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate Matter	For process weights up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ For process weights greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$ Where: E = Allowable emission rate in pounds per hour P = Process weight in tons per hour	15A NCAC 2D .0515
	Compliance assurance monitoring for ES112, ES113A and B, ES114 and associated bagfilters (CD11, CD12, and CD13, respectively)	15A NCAC 2D .0614
Visible emissions	20% opacity	15A NCAC 2D .0521
Odorous emissions	See Section 2.2 B **State-enforceable only**	15A NCAC 2D .1806
PM_{10} and $PM_{2.5}$	Best Available Control Technology	15A NCAC 2D .0530

1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the DRI handling operations **(ID Nos. ES112 through ES114)** shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 Q.1.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the DRI handling operations **(ID Nos. ES112 through ES114)** shall be controlled by the bagfilters as indicated above **(ID Nos. CD11 through CD13)**. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the

manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:

i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.

d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the DRI handling operations **(ID Nos. ES112 through ES114)** shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 Q.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring [15A NCAC 02Q .0508(f)]

c. To assure compliance, once a week the Permittee shall observe the emission points of the DRI handling operations **(ID Nos. ES112 through ES114)** for any visible emissions above normal. The weekly observation must be made for each week of the calendar year period to ensure compliance with this requirement. If visible emissions from the sources are observed to be above normal, the Permittee shall either:
   i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or

ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 Q.2.a, above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 02D .0521.

Recordkeeping [15A NCAC 02Q .0508(f)]

d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
   iii. the results of any corrective actions performed.

   The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521 if these records are not maintained.

Reporting [15A NCAC 02Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0614: COMPLIANCE ASSURANCE MONITORING

a. For the bagfilters associated with the DRI handling operations (ID Nos. CD11, CD12, and CD13), the Permittee shall comply with 40 CFR part 64 pursuant to 15A NCAC 2D .0614 to assure that the DRI barge receiving hopper **(ID No. ES112**), DRI storage silos **(ID Nos. ES113A and B),** and DRI day bins **(ID No. ES114)** complies with the emission limits of 15A NCAC 2D .0515 and 15A NCAC 2D .0521.

b. To assure compliance, the particulate emissions and visible emissions from the DRI barge receiving hopper **(ID No. ES112)** shall be controlled by the associated bagfilter **(ID No. CD11);** particulate emissions and visible emissions from the DRI storage silos (**ID Nos. ES113A and B)** shall be controlled by the associated bagfilter **(ID No. CD12)**; and particulate emissions and visible emissions from the DRI day bins **(ID No. ES114)** shall be controlled by the associated bagfilter **(ID No. CD13)**.

Monitoring/Recordkeeping

c. To assure compliance, the Permittee shall conduct daily observations of the visible emissions from each DRI handling bagfilter **(ID Nos. CD11, CD12, and CD13)** for six minutes, using EPA Reference Method 22 procedures.
   i. If visible emissions from each DRI handling bagfilter **(ID Nos. CD11, CD12, and CD13)** are observed then an excursion has occurred.
      A. In the event of an excursion, the Permittee shall take appropriate action to correct the excursion as soon as practicable.
      B. If greater than or equal to five observations during any consecutive 6-month period qualify as excursions, then the Permittee shall develop a Quality Improvement Plan in accordance with 40 CFR 64.8.

ii. The results of the monitoring shall be maintained in a logbook (written or electronic format) on site and made available to an authorized representative upon request. The logbook shall record the following:
   A. The date and time of each recorded action;
   B. All visible emissions observations
   C. The results of any corrective actions performed;

iii. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0614 if the visible emissions from the DRI handling operations bagfilters **(ID Nos. CD11, CD12, and CD13)** are not observed or if the records are not maintained.

Recordkeeping and Reporting [15A NCAC 2Q .0508(f) and 40 CFR §64.9]

d. **§64.9 Reporting and recordkeeping requirements.**

(a) *General reporting requirements.*

(1) On and after the date specified in §64.7(a) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the permitting authority in accordance with §70.6(a)(3)(iii) of this chapter.

(2) A report for monitoring under this part shall include, at a minimum, the information required under §70.6(a)(3)(iii) of this chapter and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(b) *General recordkeeping requirements.*

(1) The owner or operator shall comply with the recordkeeping requirements specified in §70.6(a)(3)(ii) of this chapter. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

e. The Permittee shall submit a summary report of the monitoring postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

4. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from the above sources are as follows:

Source	BACT Limit, PM10/PM2.5
DRI Barge Receiving Hopper (ES112)	0.005 grains per dry standard cubic foot
DRI Storage Silos (ES113A and 113B)	0.005 grains per dry standard cubic foot
DRI Day bins (ES114)	0.005 grains per dry standard cubic foot

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.2 Q.4.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. The facility shall conduct monitoring, recordkeeping and reporting as specified in 2.1 Q.1 above.

R. One gasoline storage tank, 250 gallon capacity (ID No. OT-08) and one gasoline storage tank, 1,000 gallon capacity (ID No. OT-43)

The following provides a summary of limits and/or standards for the emission sources described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Toxic Air Pollutants	**State-enforceable only** See Section 2.2 A1.	15A NCAC 2D .1100
Hazardous Air Pollutants	Maximum Achievable Control Technology	15A NCAC 2D .1111 [40 CFR Part 63, Subpart CCCCCC]

1. 15A NCAC 2D .1111: 40 CFR Part 63, Subpart CCCCCC, "NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES"

Applicability [15A NCAC 2D .1111 and 40 CFR §63.11111]

a. The gasoline storage tanks **(ID Nos. OT-08 and OT-43)** are subject to Environmental Management Commission Standard 15A NCAC 2D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR Part 63, Subpart CCCCCC," including Subpart A "General Provisions."

Compliance Date [40 CFR 63.11113(b)]

b. The Permittee shall comply with the applicable requirements for the gasoline storage tanks **(ID No. OT-08 and OT-43)** no later than January 10, 2011.

Operational Requirements [15A NCAC 2D .1111 and 40 CFR §63.11115 and 63.11116]

c. The Permittee shall, at all times, operate and maintain the gasoline storage tanks **(ID Nos. OT-08 and OT-43)** in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

d. The Permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. At a minimum, the Permittee shall take the following measures to minimize emissions from each gasoline storage tank **(ID No. OT-08 and OT-43)**:
   (i) Minimize gasoline spills.
   (ii) Clean up spills as expeditiously as practicable.
   (iii) Cover all open gasoline containers and all tank fill-pipes on the gasoline storage tanks **(ID Nos. OT-08 and OT-43)** with a gasketed seal when not in use. A portable gasoline container that meets the requirements of 40 CFR Part 59, Subpart F, is considered acceptable for compliance with this condition.
   (iv) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the operational requirements above are not met.

Notifications/Reporting [15A NCAC 2D .1111 and 40 CFR §63.11116(b)]

e. The Permittee is not required to submit notifications or reports for the gasoline storage tanks **(ID Nos. OT-08 and OT-43)**.

Recordkeeping [15A NCAC 2D.1111 and 40 CFR §§63.11111(e) and 63.11116(b)

f. The Permittee shall maintain records to document monthly throughput.

g. The Permittee shall have records documenting the monthly gasoline throughput available within 24 hours of a request from DAQ.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the recordkeeping requirements above are not met.

S. Two (2) Bundle Natural gas-fired Oxygen Vaporizer (ID No. ES201, Bundle #1 is 8.47 million Btu per hour, and Bundle #2 is 3.74 million Btu per hour), Natural gas-fired Plasma Shear (ID No. ES205, 0.32 million Btu per hour), Natural gas-fired Burning Bed (ID No. ES206, 0.32 million Btu per hour), Natural gas-fired Temporary Boiler (ID No. ES204, 11.16 million Btu per hour), Natural gas-fired Car Bottom Furnace (ID No. ES202, 50 million Btu per hour), Natural gas-fired Lime Injection System Burners (ID No. ES203, 12.36 million Btu per hour total), and Rolling Mill Operations (ID No. ES207)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
For sources ID Nos. ES201 and 204: Particulate matter	0.48 pounds per million Btu heat input	15A NCAC 02D .0503
For sources ID Nos. ES202, 203, 205, and 206: Particulate Matter	For process weights up to 30 tons per hour: $E = 4.10 \times P^{0.67}$ For process weights greater than 30 tons per hour: $E = 55.0(P)^{0.11} - 40$ Where: E = Allowable emission rate in pounds per hour P = Process weight in tons per hour	15A NCAC 02D .0515
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20% opacity	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2.C.1. **State-enforceable only**	15A NCAC 02D .1100
Odorous emissions	See Section 2.2.B.1. **State-enforceable only**	15A NCAC 02D .1806
Various	Best Available Control Technology	15A NCAC 02Q .0530

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of Natural gas that are discharged from the oxygen vaporizer (**ID No. ES201**) and temporary boiler (**ID No. ES204**) into the atmosphere shall not exceed 0.48 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 S. 1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

2. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the car bottom furnace, lime injection system burners, plasma shear, and burning bed (**ID Nos. ES202, ES203, ES205, and ES206**) shall not exceed an allowable emission rate as calculated by one of the following equation: [15A NCAC 2D .0515(a)]

For process rates up to 30 tons per hour: $E = 4.10 \times P^{0.67}$
For process rates greater than 30 tons per hour: $E = 55 \times P^{0.11} - 40$
Where: E = allowable emissions rate in pounds per hour
P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 S.2.a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. The Permittee shall maintain production records such that the process rates "P" in tons per hour, as specified by the formulas contained above (or the formulas contained in 15A NCAC 2D .0515) can be derived, and shall make these records available to a DAQ authorized representative upon request. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the production records are not maintained or the types of materials and finishes are not monitored

d. Particulate matter emissions from the lime injection system (**ID No. ES203**) shall be controlled by a bagfilter (**ID No. CD01**). Particulate matter emissions from the plasma shear (**ID No. ES205**) shall be controlled by a bagfilter (**ID No. CD15**). Particulate matter emissions from the burning bed (ID No. ES206) shall be controlled by a bagfilter (**ID No. CD16**). To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
   i. a monthly visual inspection of the system ductwork and material collection unit for leaks; and
   ii. an annual (for each 12 month period following the initial inspection) internal inspection of the bagfilter's structural integrity.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the ductwork and bagfilters are not inspected and maintained.

e. The results of inspection and maintenance shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
   i. the date and time of each recorded action;
   ii. the results of each inspection;
   iii. the results of any maintenance performed on the bagfilters; and
   iv. any variance from manufacturer's recommendations, if any, and corrections made.

   The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit the results of any maintenance performed on the bagfilters within 30 days of a written request by the DAQ.

g. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the oxygen vaporizer (**ID No. ES201**), car bottom furnace (**ID No. ES202**), lime injection system (**ID No. ES203**), temporary boiler (**ID No. ES204**), plasma shear (**ID No. ES205**), and burning bed (**ID No. ES206**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 S.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in the above sources.

4. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the above sources (**ID Nos. ES201, ES202, ES203, ES204, ES205, ES206, and ES207**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 J.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas in the oxygen vaporizer (**ID No. ES201**), car bottom furnace (**ID No. ES202**), and temporary boiler (**ID No. ES204**).

For Emission Source ID Nos. ES203 and ES206:

Monitoring [15A NCAC 2Q .0508(f)]

d. To assure compliance, once a month the Permittee shall observe the emission points of this source for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. The Permittee shall establish "normal" for these sources in the first 30 days following the effective date of the permit. If visible emissions from this source are observed to be above normal, the Permittee shall either:

i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2D .2610 (Method 9) for 12 minutes is below the limit given in Section 2.1 S.4. a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

Recordkeeping [15A NCAC 2Q .0508(f)]

e. The results of the monitoring shall be maintained in a log (written or electronic format) on-site and made available to an authorized representative upon request. The log shall record the following:
i. the date and time of each recorded action;
ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

Reporting [15A NCAC 2Q .0508(f)]

f. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) requirement for rolling mill operations (**ID No. ES207**) is to utilize best management practices to minimize the amount of oil and grease used. The BACT limit is the potential emissions from the rolling/finishing/shipping operations and equal 7.6 tons VOC per year.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

b. No monitoring, recordkeeping, or reporting is required to assure compliance with this limit.

6. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted emission limits from the above sources are as follows:

Source	BACT Limit, PM10/PM2.5
Plasma shear (ES205)	1.20E-01 pounds per hour
Burning bed (ES206)	1.93E-01 pounds per hour

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.2 S.6.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. The facility shall conduct monitoring, recordkeeping and reporting as specified in 2.1 S.2 above.

7. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted work practices for the combustion sources listed above, excluding the temporary boiler, are as follows:

Pollutant	BACT limits
Various	Use of natural gas as fuel with low NOx burners
	Good combustion practices

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 S.7.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required.

8. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted work practices for the temporary boiler are as follows:

Pollutant	BACT limits
Various	Use of natural gas as fuel
	Good combustion practices

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 S.8.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required.

T. Natural gas-fired Oxygen Plant Vaporizers 1 and 2 (ID Nos. ES208 and ES209, 11.0 million Btu per hour heat input each)

The following provides a summary of limits and/or standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
Particulate matter	0.48 pounds per million Btu heat input	15A NCAC 02D .0503
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20% opacity	15A NCAC 02D .0521
Toxic Air Pollutants	See Section 2.2.C.1. **State-enforceable only**	15A NCAC 02D .1100
Odorous emissions	See Section 2.2.B.1. **State-enforceable only**	15A NCAC 02D .1806
Various	Best Available Control Technology	15A NCAC 02D .0530

1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

a. Emissions of particulate matter from the combustion of Natural gas that are discharged from the vaporizer burners (**ID Nos. ES208 and ES209**) into the atmosphere shall not exceed 0.43 pounds per million Btu heat input. [15A NCAC 2D .0503(a)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 T. 1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas in these sources.

2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the vaporizer burners (**ID Nos. ES208 and ES209**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 T.2.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the combustion of natural gas in the above sources.

3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from the oxygen plant vaporizers (**ID Nos. ES208 and ES209**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521(d)]

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 T.3.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required for visible emissions from the combustion of natural gas in the vaporizer burners (**ID Nos. ES208 and ES209**).

4. 15A NCAC 2D .0524: NEW SOURCE PERFORMANCE STANDARDS
(40 CFR 60, Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units)

a. For oxygen plant vaporizer burners (**ID Nos. ES208 and ES209**), the Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

b. **NSPS REQUIREMENTS** - In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to notify the DAQ in writing of the following:
   i. The date construction (40 CFR 60.7) or reconstruction (40 CFR 60.15) of an affected facility is commenced, postmarked no later than 30 days after such date; this notification shall include the design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility; and
   ii. A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

c. **Recordkeeping** [15A NCAC 2Q .0508(f)]
In addition to any other recordkeeping required by 40 CFR §60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired at the oxygen plant vaporizer burners (**ID Nos. ES208 and ES209**) during each month. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained. [40 CFR 60.48c(g)(2)]

All instances of deviations from the requirements of this permit must be clearly identified.

5. 15A NCAC 2D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

a. The "Best Available Control Technology" (BACT) permitted work practices for the combustion sources listed above are as follows:

Pollutant	BACT limits

Various	Use of natural gas as fuel with low NOx burners
	Good combustion practices

Testing [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 T.5.a, above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required.

2.2-Multiple Emission Source(s) Specific Limitations and Conditions

A. Facility-Wide Affected Sources

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .1100: CONTROL OF TOXIC AIR POLLUTANTS

a. Pursuant to 15A NCAC 2D .1100 and in accordance with the approved application for an air toxic compliance demonstration, the following permit limits shall not be exceeded:

Table 2.2.A.1

Emission Source ID Number and Emission Source Description	Emission Point ID No.	Allowable Emission Rate		
		Acrolein (lb/hour)	Benzene (lb/year)	Formaldehyde (lb/hour)
ES02 Ladle Metallurgy Furnace ES03 Slab Caster ES16 Dust System ES203 Lime Injection System Burners	CD01 Melt Shop Baghouse	2.17E-7	1.79E+4	9.03E-4
ES-108 Plasma Sheer ES-109 Plasma Torch - Normalizing	CD09	1.15E-8	1.18E-2	4.800E-5
ES-110 Plasma Sheer ES-111 Plasma Torch - Q&T	CD10	1.15E-8	1.18E-2	4.800E-5
ES205 Plasma Shear	CD15	5.61E-9	5.74E-3	2.34E-5
ES206 Burning Bed	CD16	5.61E-9	5.74E-3	2.34E-5
ES208 Oxygen Plant Vaporizer 1	ES208	1.93E-7	1.97E-1	8.04E-4
ES209 Oxygen Plant Vaporizer 2	ES209	1.93E-7	1.97E-1	8.04E-4
ES04 Reheat Furnace	ES04	5.42E-6	5.70	2.30E-2
ES01 to ES03, ES05 to ES15, ES94, and ES106 Fugitives	Melt Shop Roof EP03 and EP04	9.88E-6	9.07E+1	1.68E-2
ES96 Austenitizing Furnace	52A and 52B	6.32E-7	6.6E-1	2.70E-3
ES97 Tempering Furnace	53A and 53B	6.49E-7	6.8E-1	2.78E-3
ES98 and ES99 Q&T Line Torches	CD07; Point 51	1.26E-08	1.29E-2	5.26E-5

Table 2.2.A.2

Emission Source ID Number and Emission Source Description	Emission Point ID No.	Allowable Emission Rate			
		Arsenic (lb/year)	Beryllium (lb/year)	Cadmium (lb/year)	Chromium VI (lb/24-hr)
ES02 Ladle Metallurgy Furnace ES03 Slab Caster ES16 Dust System ES203 Lime Injection System Burners	CD01 Melt Shop Baghouse	10.03	2.38E+1	2.91E+2	6.88E-2

Emission Source ID Number and Emission Source Description	Emission Point ID No.	Allowable Emission Rate			
		Arsenic (lb/year)	Beryllium (lb/year)	Cadmium (lb/year)	Chromium VI (lb/24-hr)
ES-108 Plasma Sheer ES-109 Plasma Torch - Normalizing	CD09	1.12E-3	6.73E-5	6.17E-3	1.12E-5
ES-110 Plasma Sheer ES-111 Plasma Torch - Q&T	CD10	1.12E-3	6.73E-5	6.17E-3	1.12E-5
ES205 Plasma Shear	CD15	5.47E-4	3.28E-5	3.00E-3	5.45E-6
ES206 Burning Bed	CD16	5.47E-4	3.28E-5	3.00E-3	5.45E-6
ES208 Oxygen Plant Vaporizer 1	ES208	1.88E-2	1.13E-3	1.03E-1	1.87E-4
ES209 Oxygen Plant Vaporizer 2	ES209	1.88E02	1.13E-3	1.03E-1	1.87E-4
ES04 Reheat Furnace	ES04	5.3E-1	3.5E-2	2.98	1.04E-3
ES01 to ES03, ES05 to ES15, ES94, and ES106 Fugitives	EP03 and EP04	1.31	1.28	3.56E+1	3.41E-3
ES37 Slag Processing Area	SL1 to SL6	7.38E-1	8.05E-2	1.37E-1	1.87E-4
ES96 Austenitizing Furnace	52A and 52B	6.3E-2	3.78E-3	3.5E-1	1.21E-3
ES97 Tempering Furnace	53A and 53B	6.5E-2	3.89E-3	3.6E-1	1.24E-3
ES98 and ES99 Q&T Line Torches	CD07	1.23E-3	7.38E-5	6.80E-3	1.23E-5

Table 2.2.A.3

Emission Source ID Number and Emission Source Description	Emission Point ID No.	Allowable Emission Rate		
		Manganese (lb/24-hr)	Mercury (lb/24-hr)	Nickel (lb/24-hr)
ES02 Ladle Metallurgy Furnace ES03 Slab Caster ES16 Dust System ES203Lime Injection System Burners	CD01 Melt Shop Baghouse	4.59	5.9	7.0E-1
ES-108 Plasma Sheer ES-109 Plasma Torch - Normalizing	CD09	5.84E-6	3.99E-6	3.23E-5
ES-110 Plasma Sheer ES-111 Plasma Torch - Q&T	CD10	5.84E-6	3.99E-6	3.23E-5
ES205 Plasma Shear	CD15	2.84E-6	1.95E-6	1.57E-5
ES206 Burning Bed	CD16	2.84E-6	1.95E-6	1.57E-5
ES208 Oxygen Plant Vaporizer 1	ES208	9.78E-5	6.70E-5	5.40E-4
ES209 Oxygen Plant Vaporizer 2	ES209	9.78E-5	6.70E-5	5.40E-4
ES04 Reheat Furnace	ES04	3.01E-3	2.00E-3	1.6E-2
ES01 to ES03, ES05 to ES15, ES94, and ES106 Fugitives	EP03 and EP04	6.13	8.77E-3	1.37E-1
ES37 Slag Processing Area	SL1 to SL6	1.94	1.92E-5	3.3E-3

Emission Source ID Number and Emission Source Description	Emission Point ID No.	Allowable Emission Rate		
		Manganese (lb/24-hr)	Mercury (lb/24-hr)	Nickel (lb/24-hr)
ES96 Austenitizing Furnace	52A and 52B	3.28E-4	2.25E-4	1.82E-3
ES97 Tempering Furnace	53A and 53B	3.37E-4	2.30E-4	1.86E-3
ES98 and ES99 Q&T Line Torches	CD07	6.40E-6	4.38E-6	3.54E-5

Table 2.2.A.4

Emission Source ID Number and Emission Source Description	Emission Point ID No.	Allowable Emission Rate	
		Hexane (lb/hour)	
ES02 Ladle Metallurgy Furnace ES03 Slab Caster ES16 Dust System ES203Lime Injection System Burners	CD01 Melt Shop Baghouse	2.17E-2	
ES-108 Plasma Sheer ES-109 Plasma Torch - Normalizing	CD09	1.15E-3	
ES-110 Plasma Sheer ES-111 Plasma Torch - Q&T	CD10	1.15E-3	
ES98 and ES99 Q&T Line Torches	CD07	1.26E-3	
ES205 Plasma Shear	CD15	5.61E-4	
ES206 Burning Bed	CD16	5.61E-4	
ES208 Oxygen Plant Vaporizer 1	ES208	1.93E-2	
ES209 Oxygen Plant Vaporizer 2	ES209	1.93E-2	
ES04 Reheat Furnace	ES04	5.6E-1	
ES01 to ES03, ES05 to ES15, ES94, and ES106 Fugitives	EP03 and EP04	3.93E-1	
ES96 Austenitizing Furnace	52A and 52B	6.5E-2	
ES97 Tempering Furnace	53A and 53B	6.7E-2	

Testing [15A NCAC 02Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3.

Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping, or reporting is required.

B. Facility-Wide Affected Sources

STATE-ENFORCEABLE ONLY

1. 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

SECTION 3 - GENERAL CONDITIONS (version 5.3, 08/21/2018)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]
1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]
The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]
In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]
Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality

1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]
The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY
The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**
1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**
1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
   a. changes in the information submitted in the application;
   b. changes that modify equipment or processes; or
   c. changes in the quantity or quality of materials processed.

   If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
   i. the changes are not a modification under Title I of the Federal Clean Air Act;
   ii. the changes do not cause the allowable emissions under the permit to be exceeded;
   iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
   iv. the Permittee shall attach the notice to the relevant permit.
c. The written notification shall include:
   i. a description of the change;
   ii. the date on which the change will occur;
   iii. any change in emissions; and
   iv. any permit term or condition that is no longer applicable as a result of the change.
d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.

3. Off Permit Changes [15A NCAC 02Q .0523(b)]
   The Permittee may make changes in the operation or emissions without revising the permit if:
   a. the change affects only insignificant activities and the activities remain insignificant after the change; or
   b. the change is not covered under any applicable requirement.
4. Emissions Trading [15A NCAC 02Q .0523(c)]
   To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A **Reporting Requirements for Excess Emissions and Permit Deviations** [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

"Deviations" - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
   a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
      i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:

- name and location of the facility;
- nature and cause of the malfunction or breakdown;
- time when the malfunction or breakdown is first observed;
- expected duration; and
- estimated rate of emissions;

ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and

iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
   a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B **Other Requirements under 15A NCAC 02D .0535**

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. **Emergency Provisions** [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
   a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
   b. the permitted facility was at the time being properly operated;
   c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
   d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]
This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]
It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]
1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]
The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]
The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]
The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements

as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:
   a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
   b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
   c. the applicable requirements under Title IV; or
   d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. **Termination, Modification, and Revocation of the Permit** [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. **Insignificant Activities** [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]
This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. **Inspection and Entry** [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]
1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
   a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
   b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
   c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
   d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

   Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.
2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. **Annual Fee Payment** [15A NCAC 02Q .0508(i)(10)]
1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]
The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]
Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]
A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]
The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History [**15A NCAC 02Q .0507(d)(4)]
The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]
1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]
If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) –** FEDERALLY-ENFORCEABLE ONLY
Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]
This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. **Air Pollution Emergency Episode** [15A NCAC 02D .0300]
Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. **Registration of Air Pollution Sources** [15A NCAC 02D .0202]
The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. **Ambient Air Quality Standards** [15A NCAC 02D .0501(c)]
In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. **General Emissions Testing and Reporting Requirements** [15A NCAC 02Q .0508(i)(16)]
Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
    a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
        i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
        ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
        iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
    b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. **Reopening for Cause** [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
   a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
   b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
   c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. **Reporting Requirements for Non-Operating Equipment** [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. **Fugitive Dust Control Requirement** [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q .0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V

Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.

3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
   a. a description of the change at the facility;
   b. the date on which the change will occur;
   c. any change in emissions; and
   d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternative Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM_{10}	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound